

DOCUMENT RESUME

ED 458 076

RC 023 215

AUTHOR Mathis, William J.
TITLE How To Analyze Your State's Education Funding System. A Workbook from the Rural School and Community Trust Policy Program.
INSTITUTION Rural School and Community Trust, Washington, DC.
PUB DATE 2001-06-00
NOTE 62p.
AVAILABLE FROM For full text:
<http://www.ruraledu.org/publications.html#finance>.
PUB TYPE Guides - Non-Classroom (055)
EDRS PRICE MF01/PC03 Plus Postage.
DESCRIPTORS *Change Strategies; Court Litigation; Court Role;
*Educational Equity (Finance); Educational Legislation;
Educational Policy; Elementary Secondary Education; Equal Education; Lobbying; *Politics of Education; *Resource Materials; *Rural Education; Social Networks
IDENTIFIERS *Educational Adequacy; Grassroots Efforts

ABSTRACT

This booklet aims to help concerned citizens change laws and school funding systems to improve equity and adequacy for rural education programs. It will help readers gather the information they need, evaluate its meaning, put it in context, establish networks with others, and work with their legislatures and courts to solve the problems. Chapter 1 is about finding and accessing a state's "equity network." It explains why networks are important and how to find a state's network, build and expand the network, find resource people, and access a compendium of public school finance programs in the United States and Canada. Chapter 2 explains how to gather and organize preliminary information. It covers current funding information on each state, constitutional guarantees and legal background, and reports and research on states' equity and adequacy. Chapter 3 describes how to analyze a state's equity and equality. Topics covered include collecting needed information, basic concepts of equality, key definitions, measuring equity, matching resources to needs, and applying equity principles. Chapter 4 discusses educational adequacy, including adequacy and constitutional entitlements, defining adequacy, when to use adequacy criteria, and the advantages and disadvantages of adequacy approaches. Chapter 5 examines ways to change the system. Topics include legal strategies, political or legislative remedies, public information campaigns, and how to maintain the remedy. Appendices present a flow chart for analyzing state financing systems, authors of state descriptions of educational finance systems, and an annotated index to resources and references with 44 entries. (TD)



U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as
received from the person or organization
originating it.

Minor changes have been made to improve
reproduction quality.

• Points of view or opinions stated in this docu-
ment do not necessarily represent official
OERI position or policy.

PERMISSION TO REPRODUCE AND
DISSEMINATE THIS MATERIAL HAS
BEEN GRANTED BY

K. Nestra

TO THE EDUCATIONAL RESOURCES
INFORMATION CENTER (ERIC)

1

HOW TO ANALYZE YOUR STATE'S EDUCATION FUNDING SYSTEM

By
William J. Mathis

A Workbook from the Rural School and Community Trust Policy Program
June 2001

The Rural School and Community Trust's Rural Education Finance Center (REFC) is dedicated to improving educational opportunity for rural children by reducing inequities in state school finance systems, strengthening the fiscal practices of rural schools, and insuring the adequacy of funding to rural schools. For more information, please contact:

Gregory C. Malhoit, Director
Rural Education Finance Center
3344 Hillsborough St., Suite 302
Raleigh, NC 27607

Phone: (919) 833-4541
E-mail: greg.malhoit@ruraledu.org
Website: www.ruraledu.org

THE RURAL SCHOOL AND COMMUNITY TRUST

The Rural School and Community Trust (Rural Trust) is a nonprofit educational organization dedicated to enlarging student learning and improving community life by strengthening relationships between rural schools and communities and engaging students in community-based public work.

Through advocacy, research and outreach, the Rural Trust strives to create a more favorable environment for rural schooling, for student work with public audience and use and for more active community participation in schooling.

Founded as the Annenberg Rural Challenge in 1995, the Rural Trust today works with more than 700 rural elementary and secondary schools in 35 states.

**Visit www.ruraledu.org/finance.html
for updates and to use the online version of this booklet.**

Copyright 2001, Rural School and Community Trust

Table of Contents

Introduction

Purpose of the Booklet	1
The Context	1
Getting Started: Essential Steps	2

Chapter 1

Finding and Accessing your “Equity Network”

Why Networks are Important.....	5
Finding your State's Network.....	5
Building and Expanding the Network	6
Resource People	6
The State Compendium	7

Chapter 2

Gathering and Organizing Preliminary Information

Current Funding Information on Your State.....	8
Constitutional Guarantees and Legal Background	9
Reports and Research on your State's Equity and Adequacy	11

Chapter 3

Analyzing your State's Equity and Equality

Collecting Needed Information.....	20
Beginning your Analysis: Some Basic Concepts of Equality	22
Key Definitions	24
Measuring Equity	25
Matching Resources to Needs: Categorical Aids	33
Applying Equity Principles	37

Chapter 4

Educational Adequacy

Adequacy and Constitutional Entitlements.....	39
Defining Adequacy.....	39
When Would You Use Adequacy Criteria?	41
Advantages and Disadvantages of Adequacy Approaches	42

Chapter 5

Changing the System

The Legal Strategy.....	44
Political or Legislative Remedies	45
Public Information Campaigns.....	45
Maintaining the Remedy.....	46

Appendices:

A. Step by Step Flow-Chart for Analyzing your State Finance System	47
B. Authors of State Descriptions of Educational Finance Systems.....	49
C. Annotated Index to Resources and References	51

Introduction

*Is it Equitable?
Is it Fair?
What Should You Do About It?*

Purpose of this Booklet

If you are a rural citizen concerned about the fairness (or lack of fairness) of your state's school finance system, this booklet is for you. It will help you get the information you need, and connect you with people who have similar interests and who can help. It will provide you with tools to analyze your state's school finance system. Its ultimate purpose is to change laws and school funding systems to provide equity and adequacy for rural education programs.

You will find that some parts of this booklet are simple and easy to follow, while others may be more complicated and difficult. Most likely, you will skim over some sections and concentrate on others. The booklet is designed with these different needs in mind. If you have questions, the **Rural Education Finance Center** is available as a resource. You may need to talk over some of the issues and terms discussed in the first part of the booklet, or to get advice on some of the unique statistical procedures and how to apply them in your state. People have different levels of background and expertise, and the Rural Education Finance Center is available to help, whatever your previous experience with school finance issues. The most important thing is that you get involved.

Throughout the text, you will find boxed "Guiding Questions." These are reflection points. You will need to ask yourself about your unique state situation and your specialties, skills and circumstances. In every case, tools are provided to help you move forward. Appendix A also provides a step-by-step flowchart to guide you through the process of analyzing your state's finance system.

The Context

Throughout the country, you can find citizens, school board members and parents who feel that their school funding system is unfair. In their own communities, they see run-down school buildings, outdated texts, large classes and few support staff. Their limited computers are obsolete. This is in contrast to the more-affluent suburbs and neighborhoods, where they see modern, expensive, well-maintained facilities, new computer laboratories, and plenty of learning materials in the classrooms and libraries. While they struggle to make do, other schools boast small class sizes, highly qualified faculty, lots of special services personnel, and numerous support staff.

Parents in communities whose schools are struggling care just as much about education. They are just as willing to pay taxes. But they simply do not have the money, even at higher tax rates, to fund an education as good as that in richer towns. Often, they cannot even provide a minimally adequate education to their children.

As anxious as they are about their children's education, they are frustrated. They don't know how to change the system. They don't know how to prove their funding system is unfair. Gathering the information seems like an overwhelming and impossible job. They don't know what to ask for or who to ask. They are apprehensive about bureaucratic runarounds. They will have to tackle the legislative, judicial and administrative branches of government to solve their problems.

If these issues matter to you, this booklet is designed to help you address them. It will help you gather the information you need, evaluate its meaning, put it in context, establish networks with others, and work with your legislature and courts to solve the problems.

In every state with successful reform, there is a small handful of people who made all the difference. They had few resources, but they persevered. Often at odds with the interests of the existing political structure, they faced daunting obstacles. They learned to enlist the media in their cause, and to make what seemed impossible a reality.

Guiding Questions #1

Improving your state's finance system does not require that you are in any political "inner-circle," but it does require that you talk and work with your friends and neighbors with similar concerns.

Being effective does not require special financial or statistical expertise, but it does mean that you may need to call on people who have this knowledge. The **Rural Education Finance Center** can help you do that.

Working on this means that you and your friends will need to make a time commitment. This does not mean that you must forsake your children, family and life for the cause. Rather, that you make steady, incremental progress along several fronts over a fairly long period of time. There will be bursts of activity and lulls. These efforts are measured in years rather than weeks. A steady and relaxed pace does the job.

Political and school finance circumstances change. The type and degree of fairness and equity shift from year to year. A large state reform a few years ago may now have become under-funded, outdated or politically unpopular. Likewise, people involved in reform shift over time. People involved earlier may no longer be interested, while new people emerge. Among your friends and colleagues, leadership roles will be shared and will change over time.

Getting Started: Essential Steps

Your focus will become more refined as you go through the stages. In many states, prior work and court cases will provide you with highly refined definitions of the problems.

(For a shortcut through these following points, see the flowchart in Appendix A.)

Steps for getting started:

1. *Find your state's "equity network."*

In 45 of the 50 states, the school finance system has been litigated. Forty of these cases have reached the state's Supreme Court. Some cases are ongoing, yet others may not be recent. Seventeen of the cases have considered rural questions and concerns.¹ Contact your state school boards association, school administrators association, university professors who teach educational finance, and/or plaintiffs in your state's funding cases for a quick lay of the land. See Chapter 1 for specific steps on finding your network. For your state's litigation status, go to:

<http://nces.ed.gov/edfin/litigation/status.asp>.

2. *Gather and organize essential information.*

Collect information on your state's school finance system broadly and quickly (see Chapter 2). Ask for off-the-shelf analyses of the finance and educational system. Fortunately, analyses are already available in many states. The quality will vary. Often, they can quickly tell you if your preliminary focus is on the mark.

3. *Sort and evaluate the information.*

It is easy to be overwhelmed with a mass of incomprehensible and disorganized information. This booklet will help you quickly decide what to keep in the primary stack, what to keep in your files and what to discard.

4. *Define your state's concerns.*

More than likely, your state's concerns can be summarized by one or more of the following questions:

a) Are all children getting an "adequate" education? Are there schools that just don't get enough resources? Do those schools have sufficient resources to meet your state's standards for education?

b) Are the available resources distributed equitably among schools? Do some schools seem to have an overabundance of resources while others do not get enough? Is this problem a direct result of poorly distributed state aid?

c) Is there a tax or resource problem in your state? Are taxes simply insufficient (state and local) to adequately fund education?

5. *Change the System.*

Ultimately, your goal is to provide a quality education for all children by making the system more fair, equitable and adequate. Your target will almost always be a change in the law and a change in budget appropriations.

¹ See John Dayton's analysis of court cases (footnote 7)

Over the past 30 years, reform has primarily come from court-mandated actions that drive legislative and executive branch actions. While working solely with the legislature has seen some success, the courts often have proven to be the catalyst for fundamental reform.²

However, the importance of legislative driven reforms, and of smaller incremental changes, should not be underestimated. A change in a coefficient buried in a state funding formula can dramatically change funds available to rural and small schools. Changes such as these occasionally slide through as bills that receive limited attention, or as attachments to other bills when sponsors need to gather critical votes.

Political language, climate and emphases change over time. What seems impossible today, may become manageable at a later time. Likewise, you may need to adapt your approach to catch a different political wind. For example, early court cases were decided on the basis of *equitable distribution of resources*. Now with the advent of "high stakes" accountability systems, it is the state's responsibility to provide *adequate resources* to attain their mandated educational achievement levels. "Adequacy" arguments are compelling and work today, but barely existed before a pivotal 1989 Kentucky court decision.

Guiding Questions #2

As you proceed, you will find that you will narrow your focus. It is unlikely that you can pursue all areas of interest. You will need to focus on sub-areas such as rural funding, equity or adequacy. However, focus areas will, and can, shift over time.

Consultations with **Rural Education Finance Center** personnel, finance specialists, state organizations and other authorities are a highly effective and efficient way to quickly define the areas of greatest promise.

² Colwell, William Bradley. "Judicial Review: Issues of State Court Involvement in School Finance Litigation." *Journal of Educational Finance*, 24 (Summer 1998), 69-86.

Chapter 1

Finding and Accessing your “Equity Network”

It is important that you align yourself with individuals who share your concerns in order to build a network to help you attain your goals. Within your state, there are people who share your views and agenda. In some states, they are well-organized nonprofit organizations with extensive budgets and staff. In others, they are simply kindred spirits who find each other at the statehouse, through letters to the editor, electronic list serves and political organizations. Do not initially discount a group because it is small and informal. They often have powerful influences. Further, they can be the nucleus for a larger and more powerful group in the future. However, do be careful to avoid fringe groups that will do your cause more harm than good.

While your interests may be focused on rural concerns, political allies can be found with other groups representing cities, minorities, taxpayer groups and children's advocacy groups. In this sense, coalitions are more effective than single groups.

Why Networks are Important

Networks expand your ideas, access to public officials, political clout, talents and capabilities. Compatriots lend momentum and support to your activities. When setbacks occur, as they inevitably will, you will need friends in times of frustration and defeat.

Seldom does one group or one person have all the necessary skills, contacts and attributes needed to successfully effect change. Your network needs to include people with political skills, education finance expertise, data analysis, public relations and media, education system knowledge, legal expertise and organizational support. One person may be excellent at political work, but is hopeless around a database. Yet, others are computer wizards, but cannot organize or work with people. One individual or group may know the professional educational organizations, but not be familiar with the court process. Thus, a team is essential.

Difficult tasks that are virtually impossible alone become easier when using the talents of a team. Logistics also call for a network. For example, an evening speaker may be needed in a distant part of the state and one of your group lives close by. Likewise, a particular legislator may need to be visited by someone from his or her home district.

Finding Your State's Network

The most efficient way to find reform advocates is to call the state school boards association, the superintendents association, and/or the finance office at the department of education. The state education associations can, more than likely, point you in the right direction. Simply ask who are the people who press for reform and where they can be found.

Another source is statehouse reporters who cover education and taxation. It is likely that these reporters have done stories on reform somewhere along the way. They are generally open to inquiries – particularly if they sense a story.

Organizations that have an interest in taxpayer or school equity represent another source. The American Civil Liberties Union, your state's Public Interest Resource Group, the League of Women Voters, state parent-teacher organization, taxpayer associations, and municipal leagues are examples. Sometimes, business groups (Chamber of Commerce, Business Roundtable, industrial associations, etc.) can prove valuable allies. They are typically concerned about taxes, but your interests may (or may not) coincide.

Once you have two or three key names (often only one), calling them up will open the network to you. Typically, these groups are friendly to “blind” telephone calls and are searching for you as much as you are searching for them.

Building and Expanding the Network

Assuming the network is informal and not highly organized, you and your friends will likely want to multiply your contacts. Begin a directory of people with similar views and the skills they bring to the table. Ask the school boards association if you can run an announcement in their newsletter seeking people with similar interests and particular skills. Talk with senators and representatives with compatible views. Ask them who to recruit and with whom to talk.

Like all volunteer groups, people vary in skills and enthusiasm. Some will show initial interest and drop by the wayside—but keep them on your e-mail list. They may become energized later, or be drawn into the momentum. Some will be reliable and others will not. Some will work when they have time but won't when they are busy. Some are focused and productive and others are not. Cores emerge with concentric rings of degrees of involvement. In time, roles and an informal structure will emerge.

Resource People

Within the various states, there are a number of people who are experts in educational finance. In populous states, there may be as many as 50 or so people who belong to educational finance organizations. In smaller states, the number may be only one or two people. Often, (but not always) these researchers are associated with universities and colleges. In more populous states, they may work for liberal, conservative or non-partisan think tanks or special interest groups. Obviously, you need to determine their perspective.

The two national professional organizations centrally involved in educational finance issues are the American Educational Finance Association (AEFA) <http://www.ed.sc.edu/aeafa/> and the American Educational Research Association (AERA) <http://www.aera.net/>. For AERA, the Special Interest Group for school finance is known as the FIPEF-SIG.
<http://www.ed.sc.edu/drt/fiscalsig/index.html>

These experts, however, may or may not share your point of view, or their subspecialty may be in an area of little interest to you. Check with your state school boards association or state superintendents association to identify experts in your state. If you want to check the focus and interests of a particular person, look up their publications on the Educational Research Information Center (ERIC) <http://www.askeric.org>. Often, the abstract and the title of papers published by an individual will tell you the views of the author.

Within every state, there is at least one person who works for the legislature and/or the state department of education who works on state finance formulas. Typically, the education department has a finance office, while the legislature also has some capability in this area. Not only can these people provide you with information, they can also guide you toward other people with an interest or special skills in educational finance issues. Again, keep in mind, these people may or may not share your perspective.

If you need help in identifying key people within your state, call the **Rural Education Finance Center**, and we can help you get started.

The State Compendium

Go to the Web and look up "Public School Finance Programs of the United States and Canada" http://nces.ed.gov/edfin/state_finance/StateFinancing.asp

This document is a joint venture of the American Educational Finance Association and the National Center for Education Statistics. It has a chapter for each state as well as summaries of trends, reforms, legal cases and program areas. It is updated every few years. The Compendium will likely be the most comprehensive and readable single source on your state's finance system. All states have their finance systems in state laws and regulations. However, these are often difficult to read. Call the author of your state's chapter and ask for key contacts in your state. Appendix B lists the author and affiliation of each state's chapter.

Chapter 2

Gathering and Organizing Preliminary Information

Current Funding Information On Your State

In talking with your state's network people, you will likely end up with a general grasp of your state's school finance system and the top concerns. You will need to know the current status of your state's system as well as the most recent changes. Since official state documents typically lag a year or two, quick updates can be most easily accessed through the education associations and the annual "State of the State" updates. These are published by the FIPEF-SIG of AERA and by AEFA whose web addresses are in Chapter One and Appendix C. If you need to round out your knowledge, call the **Rural Education Finance Center**.

Also ask for educational finance reports from your state education department. Ask specifically for reports on educational adequacy and equity. This early step can often be as straightforward as calling your state education department's educational finance office and asking if they have relevant reports. In particular, ask for recent task force reports on state funding in all areas (general aid, special education, technical/vocational education, etc.). While many standard reports of statistical data will not prove useful, others can be invaluable.

Also, go to your state government website at [http://gov.state + \(your state's two letter postal abbreviation\).us](http://gov.state + (your state's two letter postal abbreviation).us). Each state site is organized differently and the quality and current status varies. Within the state site, go to the education department, and then to the finance section. By going to the legislative section, you may also be able to find key education and finance committee members. You will likely need to click around to see what is there. The website will often (but not always) list key reports and provide descriptive statistics.

An alternate path to state education databases is through the Center for Policy Research in Education at the University of Wisconsin-Madison at:

<http://www.wcer.wisc.edu/cpre/finance/state>

There are 19 state downloadable databases and tables for 42 of the states. However, in most cases, you will be better served to use the state's database, if available.

State Government Directory

Sometimes, you will not know which state office to call. Frequently, the state information office or the website can help. Most states have web as well as a hard copy directory of agencies, organization, offices, people, telephone numbers, and email addresses. Ask your elected officials or the state's general information office to get you a copy.

The federal database is comprehensive and uniform but, depending on the particular subset, is about four years old. Precision and detail is often lost as databases are aggregated to higher levels. Profiles for each state can be found at:

<http://nces.ed.gov/pubs2000stateprofiles/index.html>

Constitutional Guarantees and Legal Background

Virtually every state has litigated their finance system, at least once, at some level in the court system. In recent years, seventeen states have seen the finance system overturned and massive reforms instituted. Educational finance reform will most frequently be based on constitutional guarantees for education and fair taxation.

1. Getting a Quick Lay of the Land

For a brief yet comprehensive overview of the constitutional and legal issues around the nation, go to:

<http://eric.uoregon.edu/publications/digests/digest129.html>

2. Finding Out About Your State

Knowing your state's history is essential. It is the previous court cases that frame the state's definition of educational entitlements and tax fairness.

One of your first stops should be the National Center for Education Statistics (NCES) website. They have compiled a history of the litigation of each state.

<http://nces.ed.gov/edfin/Litigation/Contents.asp>

This website will give you the dates and basic outcome of your state's litigation. However, you may need more detail. You need a basic understanding of the key factors leading to your state's success (or lack of success) in the courts.

While you will not likely need detailed information in early stages, here are some sources for rapidly accessing an overview of your state's legal history:

1. Contact the professional education associations (school boards, superintendents, principals and teachers). They will have the information, or can quickly direct you to the right person.
2. Call the legal office of your state's department of education.
3. Access the Attorney General in some states for detailed information. Bear in mind that this office was probably the defendant in earlier cases.

4. Check out the state websites, including the judiciary, education and tax department sites. State court decisions are increasingly accessible on the web: www.state. + <your state's two letter postal abbreviation> + .us For example, www.state.vt.us is the Vermont state government web site.
5. Read court documents. Call the administrative office of the courts. While this will get you the documents, this may prove tedious at early stages.
6. Look at newspaper accounts, analyses by lawyers, partisans, and the like. These secondary reports are often quite useful and efficient. However, nuances are often lost and biases are often introduced in secondary reports.
7. Search the state's newspaper archives for news of the case. Newspaper files are increasingly computerized. Most of the larger papers have, to some degree, searchable archives. Analyses and commentaries can prove extremely valuable in defining avenues and approaches. Find the statehouse reporters who covered the cases. A ten- or fifteen-minute visit can give you both a list of vital contacts as well as their opinion of legal strengths and weaknesses presented in the cases.
8. A conversation with attorney(s) or plaintiff(s) in the case(s) can prove extremely valuable. The defendant attorneys often work for the state and plaintiff attorneys often worked *pro bono* or for organizations such as the ACLU. However, some attorneys are more accessible and open than others and you should check on whether you will end up with an unexpected legal bill before starting a lengthy conversation. Both sides will typically be willing to expound on how and why they won (or lost), and this helps focus your efforts.

The main threads should be relatively straightforward. Do not get caught up in the detail of motions, stipulations and procedural issues at this stage. By looking at key documents and talking with people, you should have a clear idea of your state's constitutional guarantees for education and for taxpayer fairness. You should also gain a notion of what the courts have found. This knowledge will foreclose certain approaches and open up others.

For example, your education clause may require a "thorough and efficient education" for all children but is silent about taxpayer equity. In this case, you would focus your energy on the definition of "thorough and efficient" and whether children in the state are receiving it. On the other hand, your education clause may be weak, but the fair taxation ("equal protection") clause may be strong.

Reports and Research on Your State's Equity and Adequacy

There are four basic sources of published reports on your state's equity and adequacy: (1) federal reports, (2) state government reports, (3) finance community reports and (4) partisan reports.

1. Federal Reports

The U. S. Department of Education contains the Office of Educational Research and Improvement (OERI). Within this office is the National Center for Education Statistics (NCES). Over the last several years, the quality of the NCES data has dramatically improved.

The great advantage of NCES reports is that they are generated from an independent and unbiased source, allow comparisons of your state with others, and use standard and accepted statistical conventions to analyze the data. For the most part, the information is easily accessible in hard copy or on the web.

The big disadvantage is that it takes NCES several years for the agency to collect and edit the data. Further, while each state is supposed to report the data in a common federal format, each state has its own idiosyncrasies.

Federal reports can be accessed on the web at: <http://nces.ed.gov> .

It is advisable to check the NCES website from time to time. New reports and updates appear regularly. The federal catalog is at:
<http://nces.ed.gov/pubsearch/index.asp>.

Key documents you can download or order:

Trends in Disparities in School District Level Expenditures per Pupil (NCES 2000-020)

Characteristics of Small and Rural School Districts. (NCES 97-529)

Inequalities in Public School District Revenues. (NCES 98-210)

Digest of Education Statistics: 1999. (NCES 2000-031)

"Quality Counts 2001" *Education Week*. Volume XX, No. 17, January 11, 2001. pp. 102-105. Includes tables on the financial equity and adequacy of the various states. Allows for easy comparisons. www.edweek.org This is not a NCES document. It is a comprehensive national picture with standard statistical measures although the state letter grades are suspect.

2. State Government Sources

Collect available studies and reports early in your work and evaluate their utility later. The quality and usefulness of state reports varies dramatically. In some cases, state reports are at the center of your work—such as official analyses of funding adequacy and equity. Sometimes, a study that does not seem meaningful now will be of value later.

While collecting reports, use the opportunity to collect (or bookmark) data reports and computerized databases. You will probably not use the databases or data dumps in your early work. If you need to do further analyses, you will need these in electronic form. In examining state databases, missing data fields and erroneous data are, unfortunately, quite common.

a) State Education Department

The first place to look is the state education department's website. Often, these sites will list finance studies that you can access electronically or by hard copy. As with many websites, currency and updating can be a problem.

If you have not already found the key education department people through other contacts, you may want to call the state agency and ask. More than likely, whoever answers the telephone can tell you who has the information and who is helpful. If you have access problems, you may want to ask a contact at the school boards, superintendents or teachers association to make an advance introductory call for you.

What you can reasonably expect to find at your State Education Department -

- **A description of the state aid system** as written in state law and in lay description (state chapter authors listed in Appendix B may be an alternate and easier-to-read source).
- **A description of the various special programs that distribute funds to local districts.** These "categorical" funds can only be used for a specific category such as small schools, transportation, bilingual education or other special needs. For the most current data, you may have to go to the separate program offices within the state department of education.
- **The state education budget** which lists how much goes into the various programs. These are often coded by account number and short title.

In most cases, you will want the data from the fiscal year just completed. At best, this will not be available until late fall, after the fiscal year is complete. The *current year* will not be compiled and may be subject to adjustments. More than likely, projected budgets for the *coming year* are not built or are still being negotiated.

If it looks like gibberish, ask for a "budget request" sent to the legislature by the governor, state board, and/or the state department of education. Because budget requests are documents that ask for money, they are often more helpful in explaining particular items. You cannot rely on the figures in these requests because they have not been approved by the legislature. However, the requests usually print the previous year's actual appropriations, which are numbers you may need.

Once a legislature adopts a budget (most are annual, some are biannual), it is printed. Ask for this document. Its usefulness and readability varies by state.

- **End-of-year statistical reports** that generally come in two types:

The latest state report to the federal government is quite valuable in that it contains data based on common statistical definitions used across the nation. The tradeoff is timeliness. Your state agency can provide timely data on issues of interest (within one year), but national comparison data is generally two to four years old.

The second type is the state's end-of-year report. It is typically organized around the unique structure of the state's existing finance system. This information is generally available much faster than the federal compilations.

Often, terms like "per pupil spending" will have a meaning unique to your state. Look at state summary data as well as individual counties, cities, towns and suburbs. Some quick "eyeball" contrasts using cities and towns that you know can be insightful. Do suburbs spend much more than rural areas? What are the relative taxing levels between these communities?

- **Special reports** can be anything from a two-page memo to a bound document. Legislators and government officials continually ask for reports on various topics. Accessing these documents can be as simple as telephoning or going to the rack of government publications at the information or finance office. Finding key memos and informal reports will depend on the agency's access philosophy, the quality of your relationship with the source, whether they philosophically agree with you, and the personality of the person you ask. You may want to request that someone else ask for you.

A one-day trip to your state agency (with possible visits to other offices) can prove very rewarding.

b) **Legislative Research Offices and Legislative Staff**

Second to the education department, legislative office staff may prove to be the most valuable and immediately rewarding resource. These people can provide insights, access and shortcuts that would take a long time to discover on your own.

Talk to your professional association and your local network colleagues to find the offices and individuals with the most useful information.

Depending on the state, legislative research offices may be affiliated with a political party. Obviously, the non-partisan offices will provide information, special analyses and reports with less of a spin. This does not mean that partisan work is not useful.

"Tax reform" and "education funding reform" are perennial topics for every state legislature. While most legislative bills will not be successful or are limited in scope, they generate a constant stream of special analyses and reports. These reports and analyses can provide insights and avenues useful on another day.

Guiding Questions #3

Evaluate the data you have with an eye toward equity and rurality. Do you have a clear picture? If in doubt, call the **Rural Education Finance Center** for help. You may not need to go to other state agencies.

c) **Legislative Committees and the Tax Department**

Typically, states have taxation (usually called Ways and Means, Finance or Revenue) committees and spending (Appropriations) committees in both the House and the Senate. These committees are always asking for reports and testimony that is on the public record. Ask legislative staff for particularly good testimony, off-the-shelf documents and special analyses conducted for the legislature.

At the tax department, look for end-of-year annual reports. Often, property taxes, income, sales and other taxes are in different parts of the tax departments and the reports may be in different places. Talk to your network colleagues about key people to visit.

Analyses of tax burden by income group, progressivity of the various taxes, tax capacity and a host of other information can be easily collected in short visits. Depending on the status of computerized records, you may have to find data

from earlier years in the tax department archives. These may be in the basement or a distant warehouse.

d) Other State Offices

- **Economic Development Office** – This goes by various names depending on the state. Look for reports on conditions affecting economic development, employment trends and state demographics. Also, look for studies conducted on the effects of taxation and education on the state's economic future.
- **Social Services** - Look for the research office. In justifying their budget, they have to have data on education level, incidents of crime, abuse and income level.
- **State Archives/ State Libraries** - Librarians and archivists are generally helpful. The usefulness, completeness and currency of the information varies by state.
- **Governor's Office** - Every governor has made speeches about education being "a high priority." This may or may not be reflected in the governor's actions. If the governor is a supporter of equity, this may be one of your most essential and important alliances.

In any case, one of your first telephone calls or visits will be to the governor's office. If you have political or personal access to the governor or members of his/her staff, use it. Staff or direct access can be exceptionally valuable. If you don't know these people, call the governor's office and ask for the governor's education and/or tax staff. This staff may range from a large office to a single person. They range in competence and accessibility.

Ask for the governor's position papers, proposals, printouts and perspectives. If positively received on the telephone, set up an appointment to follow up with the staff and/or with the governor—particularly if the governor is reform minded.

A Word about Access and Right-to-Know Laws

In some states, government may be small, friendly, accessible and helpful. In other states, you may have to hurdle barriers of officious bureaucrats at the "Welcome" desk, security officers and metal detectors. Some organizations are open and helpful while others are closed and unfriendly.

As noted earlier, if you have identified helpful and knowledgeable people through your networks (professional associations, reporters, local officials and the like), make maximum use of these channels.

On rare occasion, you will get stonewalled. Some state governments work in an insular and standoffish way. Use the right-to-know law only after all else fails.

There are several easy ways to find out about your state's right-to-know laws. Your local librarian or the state librarian can easily access the information. Often, it is on state websites. Check at your local municipal or school office. If you have a contact with a reporter or newspaper editor, these people are conversant with these laws. Likewise, an attorney friend or the legal office of most state agencies will know.

3. Finance Community Reports

Finance expert reports are distinguished from partisan or advocacy reports (see Chapter 3) based on scientific standards of work. Scientific work uses accepted methodologies and procedures, and is subject to review and replication by other scholars. The work is generally "refereed" in journals to assure that it uses acceptable and high quality methods. Partisan work is often designed to support a preconceived end and the data and methods are adjusted to reach the preferred conclusions.

Typically, objective and unbiased work will be reported in:

- Journal of Educational Finance
- Publications of the American Educational Research Association
- Publications of the American Educational Finance Association
- Publications of the National Center for Education Statistics
- State Education Agency Reports

Some comments on the more reliable sources:

a) *The State Compendium*

As noted earlier, this document is a joint venture of the American Educational Finance Association and the National Center for Education Statistics. It has a chapter for each state as well as summaries of trends, reforms, legal cases and program areas for the nation.

It summarizes recent issues, cites relevant and recent court cases, and describes equity issues. Since every state's chapter is organized in the same way, comparisons across states are easily accomplished. Likewise, the uniform structure and the extensive editing process provides a method of quality control for each chapter and serves to limit individual author bias.

Compendium data will be two or three years old before it is published. For those states in rapid change, you may need to supplement your knowledge from state agency sources. For most states, however, the difference of a year or two will change details but the basic concepts will still hold true.

Typically, you will find state chapters to be unbiased, factual and complete.

b) *Reports that come from State or Federal Agencies*

Look for the NCES documents. They are listed at the site map of the NCES website:

<http://nces.ed.gov/help/sitemap.asp>

Standard state reports of the state agency or NCES are generally unbiased.

However, as education has become more politicized, be cautious of task force, political committee or partisan reports developed under quick timelines to meet a political demand. Look for balanced conclusions firmly drawn from data. Be wary of rhetoric and vague appeals to abstract goods (e.g. – "International competitiveness in a global economy"). The value of each document will usually be self-evident in a quick five-minute review.

c) *Reports from Research Organizations*

Look for articles from refereed journals such as the *Journal of Educational Finance* or any of the American Educational Research Association periodicals. They have high publication standards. However, this does not mean they are free of all controversy, or that the authors are free of biases.

Even when limited to educational finance, the range of research articles can be large. They are often directly relevant to your work. However, expect that most of the papers will be peripheral to your interest. Skip by these quickly.

4. *Partisan and Advocacy Reports*

Often published as a document from an "Institute" or "Center," partisan or think-tank reports are developed as political documents to advance some group's agenda or point of view. If in doubt, check the mission statement of the sponsoring organization on their website. Look to see who is funding the effort. Check the affiliations of the board of directors. Evaluate their links to other organizations for a particular philosophical or political tilt. Look out for "pseudo-studies" designed to look and feel like unbiased research reports from some prestigious group named "The National Alliance for Educational Excellence" or something similarly titled.

You have to discern whether this is legitimate work or simply a political document. Often, simply reviewing the report will tell you whether the document is legitimate.

However, partisan or advocacy reports can be extremely valuable.

Sometimes they will provide the most direct and focused work on a topic of interest. For example, the Rural School and Community Trust has an obvious interest in promoting rural matters. Yet, they may provide the most focused and direct analyses available on rural issues.

The methodology and scientific value of partisan reports ranges from exceptionally good to very poor. If you are uncertain as to whether a report uses acceptable methodology, contact your local professional network or call the **Rural Education Finance Center**.

Look for reports on taxation, social well-being and economic strength, as well as education. However, you will need to quickly scan these documents for usefulness and direct relevance to your purpose. Certainly special education advocacy, gifted and talented, school choice, phonics and a host of other areas are important. However, they can easily lead you astray.

a) *Accessing National Partisan or Think Tank Reports*

Since these reports seek audiences, they are usually easy to find with a web search.

One of the first places to start is the *Education Week* website:

<http://www.edweek.org>

Search their archives for the past few years. You can search by state or by topic. This weekly newspaper for the education community typically carries stories on every group that puts out a report. Unfortunately, it does not usually distinguish between mainstream, established groups and those on the fringe. Likewise, it does not distinguish between studies that use good or poor methodologies. It reports what the editors consider newsworthy.

Another news source is the Association for Supervision and Curriculum Development (ASCD) web page <http://www.smartbrief.com/ascd/>. This listserve collects newspaper stories about education from around the nation and posts daily summaries.

Once you have identified organizations and interesting titles, you can generally find executive summaries and actual reports on the organization's website.

In recent years, it has become popular for groups to rank-order states or to give them letter grades on topics of interest to the group. Clearly, a group pushing for privatization of schools would rank states very differently from a group pushing for public school financial equity.

For the weeks and months following the issuance of a report, look at the letters to the editor and opinion columns in publications such as *Education Week*, and *Kappan* to see if the methodology was supported or criticized—or whether the report disappeared in the clutter.

b) *State Think-Tank Reports*

With increasing sophistication, a network of state think tanks is emerging. A number of state business groups, school choice advocates, political groups and

the like have published their own "studies" of education. (You may want to enter these ranks by publishing your own studies.) The think tanks may be well-funded and established organizations or a single individual in a cabin with a computer and a copy machine.

As with national reports, look first at the interests and purposes espoused by the publisher. Then, look at the methodology. Even if you philosophically disagree with the position of the authors, if the methodology is sound, these reports will likely contain information, findings and perspectives that you need to consider. Often, reports from groups of another perspective will point out legitimate shortcomings and considerations in your own reform plans.

With reports that are more consistent with your philosophy, the same constraints and conditions apply. If the methodology is sound and the report is of acceptable quality, then use the data and findings in your campaign.

c) **Building your own Think-Tank Reports**

This is often a good, necessary and essential step. It can give your cause prominence, legitimacy, acceptance and political muscle. But you must attend to the quality and rigor of your reports with the same skeptical eye as you would give to reports from opposing points of view.

Guiding Questions #4:

From the information gained from all these sources, do I have a clear pattern with acceptable documentation that confirms the status of education equity in my state?

In many cases, the wealth of finance data, reports and court cases will be conclusive. Ask yourself, "Would a reasonable and unbiased person be convinced of the fairness/unfairness of our educational finance system with this information?" If the answer is "yes," *the system is unfair, inadequate or inequitable*. Take the data and skip to Chapter 4 of this paper.

If the pattern is murky or you are unsure as to how to evaluate what you have, this may be the point where you call on the **Rural Education Finance Center**. Another person will always have different slants and insights and the simple act of talking through the information clarifies, focuses and brings forward new ideas. Frequently, an expert can go through your state's information and existing research findings in a fraction of the time it would take someone else. They can also help in quickly deciding which information is of value and which is not.

Chapter 3

Analyzing Your State's Equity and Equality

At this point, you will have made contacts with key people and organizations, and collected and evaluated research findings on the fairness of your state's finance system. If the available reports are not sufficient, you now need to focus on developing your own analysis.

Collecting Needed Information

In most cases, you will want both education revenues (tax sources primarily) and school spending (expenditures). That means you will need to access both tax and education databases. You will want the state aid distribution formula, and the amount of payments by district.

Information on social, demographic and economic conditions may also be needed, particularly if you want to compare rural with suburban, or affluent with non-affluent groups.

Guiding Questions #5

If you decide that further analysis is needed, this is the point where you need to ask yourself if you have the skills, interest in learning and/or the time to conduct the work yourself or ask for outside help. Some familiarity with statistical terms, manipulating large databases, statistical analyses and statistical packages will be necessary. Call the **Rural Education Finance Center** and discuss your concerns with them.

It may be that what you need exists but you are uncertain what you should be looking for. If so, scan the following section and see if this helps you identify your needs.

Don't get frozen by confusion, bogged down in trying to become an expert in another field (unless you are enjoying the work), or paralyzed by lack of knowing a particular piece of information or technique. We encourage you to ask for help.

For most people, working with others is the desirable path. The work can be split up, different skills can be utilized, and team thought is almost always more expansive and creative than the work of an individual.

1. State Data

Except for comparisons with other states, you will want to use your state's data (rather than the federal compilation) due to currency, accuracy, accessibility and your state's unique definitions and statistical systems. Generally this can be transmitted to you electronically.

Go to the appropriate state agency(s) and ask for information. More than likely, expect to have a conversation about spreadsheets, the most recent available data and its condition. Edited data will typically be older than recently compiled data, but unedited data can be troublesome. Sometimes you may want a sub-file or set of sub-

files rather than the entire database. In some cases, state personnel may do some analyses for you or they may have the analysis in an unpublished form.

Sometimes, the data is in different places. This means that you will have to merge two or more very large databases into one database, or ask for someone to do this for you. For example, tax data may have to be merged with education spending data.

Always ask for merged databases where you can. Merging databases can be difficult: A regional high school may cut across many different taxing districts. Also, the state aid data may be in a different place than the federal free and reduced lunch data (an important measure of community wealth). Social well-being statistics may be collected by county when your interest is at the community level. Likewise, be cautious of different definitions in different databases. For example, state report cards may have a different definition of "per pupil expenditures" than the federal "current expenditures" data. Within states, different definitions of spending will be used for different purposes. The definitions are not interchangeable. The cardinal rule is to make sure you do not shift definitions within the analysis.

On rare occasions, the state's website will have all the data compiled by district and all you have to do is ask for the database and download.

If you are unsure about these matters, take a database person with you or consult with them.

2. Federal Data

The primary national source of data is called the "Common Core of Data." It is available on CD-ROM from the National Center for Education Statistics (see bibliography and sources).

The information is organized by state and has a great deal of data at the school district level, but less at the school level. The database can be difficult and exasperating to use and it is always a few years old. Depending on the quality of the state's collection, the federal information can be incomplete and contain gaps.

If you are comfortable with and enjoy computer manipulation of large databases, and if you are conversant with basic statistical terms and analyses, exploring this database is always enlightening. However, in most cases, the state level database will be the one of interest to you.

3. Building Level Data

School finance battles are usually about inequities between school districts. However, more and more attention is being paid to the issue of inequities between schools within the same school district.

School-level accountability systems have driven 14 states (by early 2001) to develop school-level databases that include spending. This promises a new ability to examine whether each school is receiving the resources it needs.

At this stage, however, these building-level databases vary dramatically between and within states in the quality and the usefulness of the information. Expect school data to increase in quality and quantity over time. Go to your state's education website and look for "School Report Cards" or a similarly named file.

Beginning your Analysis: Some Basic Concepts of Equality

There are many definitions of equality. Basically, the idea is that all people be treated fairly. That is, with "equity." The definition you choose makes a great deal of difference. For example, some people say "flat taxes" are equitable because everyone is treated the same; all people pay the same rate. Opponents of flat taxes say the equal treatment of people in unequal financial circumstances is unequal. Similarly, one group may say it's fair that every school district gets the same amount of state aid per pupil—\$3,300. However, if education actually costs \$6,600 per pupil and one district has ample local tax revenue to make up the difference while another does not, then the system is unequal.

Robert Berne and Leanna Stiefel wrote the classic work on equity,³ and most textbooks have adopted their analysis of equity. For those wanting to explore equity in greater depth, a number of standard resources are listed in the bibliography. (See, for example, Swanson and King; Guthrie, Garms and Pierce; Odden and Picus; Alexander and Salmon; and the NCES Report on Inequalities).

There are a few basic concepts at the heart of defining and measuring equity for school districts (do all schools have access to a fair share of resources? do all have access to sufficient monies?) and for taxpayers (are tax burdens fair?).

Here are the key terms:

1. Ability to Pay

Ability to pay is usually thought of as, "How much money is left over after a family's basic needs are met (discretionary income) that can be used for school taxes?" That is, how much can a family afford to pay for education taxes? A family of four making \$30,000 per year has a different ability to pay than the four-person family with a \$200,000 income. However, a family's wealth in state aid formulas and in local taxation is primarily measured by property wealth. Fourteen states count income in their formulas but usually to a small degree. This may be an important factor when evaluating your state's formula.

³ Robert Berne and Leanna Stiefel, The Measurement of Equity in School Finance (Baltimore: Johns Hopkins University Press, 1984).

Real estate as a measure of wealth is a problem in rural areas. Often, farm and forestland represents a considerable asset. However, land ownership is wealth that cannot be spent, and frequently bears a weak relationship to disposable income. Thus, it is not a good measure of ability to pay. The taxed value of the land may be greater than its value in its current use as farm or forestland. In most every case, reliance upon income taxes in both the collection of taxes and distribution of state aid results in a more progressive and equitable taxing structure.

2. Horizontal Equity

Quite simply, individuals with equal abilities to pay should contribute the same amount in taxes for the same level of educational services. For example, if rural taxpayers are spending \$8,000 per student and suburban schools spend the same amount, they should have the same size tax bills if they live in homes of equal value. Likewise, if the average taxpayer is paying \$4,000 a year in school taxes, both the rural and the suburban school should be able to spend the same amount on education for the same level of taxation.

For district spending, horizontal equity means equal resources should be provided for pupils with similar needs.

3. Vertical Equity

Vertical equity is the unequal treatment of unequal. Do those with a greater income pay at a higher rate than those with a lesser income? From our earlier example, a 4% school tax on a family with an income of \$30,000 is very different from a 4% tax on an income of \$200,000. Simply put, the less affluent family has a lesser ability to pay and has a greater level of sacrifice.

On the spending side, students with greater needs should have sufficient resources to meet these needs. Schools and districts vary in the number of children that come from poor home environments, have handicapping conditions and live long distances from schools. Vertical equity means these different cost factors must be taken into account and resources must be provided in proportion to need. In finance formulas, each of the 50 states has a different definition of how much should be paid for different categories of student needs. In most cases, special student needs are given an additional allotment called categorical aid. What is considered to be the correct amount is a continuous controversy.

4. Adequacy

Adequacy refers to whether the school has sufficient resources to achieve the necessary goals of education for the students. Of course, arguments range far and wide as to what is an "adequate" level of support. Many states have low basic support levels. In these cases, an equitable distribution of inadequate resources does not meet the adequacy criterion. Few states provide the level of funding required to meet their new academic standards. In the era of high stakes assessment and growing pressure for school accountability, the idea of adequacy has taken on new power and meaning.

It has served as the new focus of litigation during the 1990s. Chapter 4 addresses adequacy in greater detail.

Key Definitions

Before beginning to look at the ways equity is measured, there are some basic terms, often taken for granted, that cause confusion in analysis, and particularly in media coverage.

- **Spending vs. Revenues** - Some analysts confuse the amount raised in revenues with spending, but they are *not* the same. From an equity point of view, expenditures are what matter most. Unspent revenues have no effect on children's education. In most cases, spending is more important than revenues in conducting equity analyses.
- **Total expenditures** – This term includes bond debt, construction and a catchall called "other expenses" (which could be the community recreation department). Of greatest importance, "total" expenditures are distorted by the uneven distribution of building construction and debt costs. These capital expenditures need to be analyzed separately. Consequently, most equity analyses do not use "total" expenditures.
- **Current expenditures** - is the preferred definition and is the standard for federal analysis as capital costs, bonded indebtedness and miscellaneous non-education expenses are not included. Pay particular attention to the definition of spending in your state. They may use a different definition that has large implications for your analysis.
- **Defining Pupils** - Since expenditures are expressed in "dollars per pupil," how you count students makes a difference, too.

The two basic measures are "average daily attendance" and "average daily membership." Attendance means how many students show up on an average day and average membership is the number of students enrolled. Some states like to use attendance in order for schools to discourage truancy. Other states prefer membership because they may be working with a population with low attendance and their fixed costs are constant regardless of attendance.

Other student count issues are important for different states and for different analyses. For example, how early education students, home-schoolers, school choice, vocational and other students are counted can have considerable impact on equity and adequacy. Seven states count "classrooms" as their basic funding unit. That is, a teacher with a certain number of students and supplies is counted to determine the state aid allocation.

The primary rule is to make sure you have "apples to apples" counts whether they are expenditures or students. Some states sometimes use different definitions for different purposes within their data. For instance, technical education funding might count

students differently than for regular education. This can be troublesome in moving from one database to another. Make sure you know what is being measured.

Typically, if all school districts count in the same way and the way the count has been taken has been stable over time, your comparisons from school-to-school and from time-to-time will be sound.

Measuring Equity

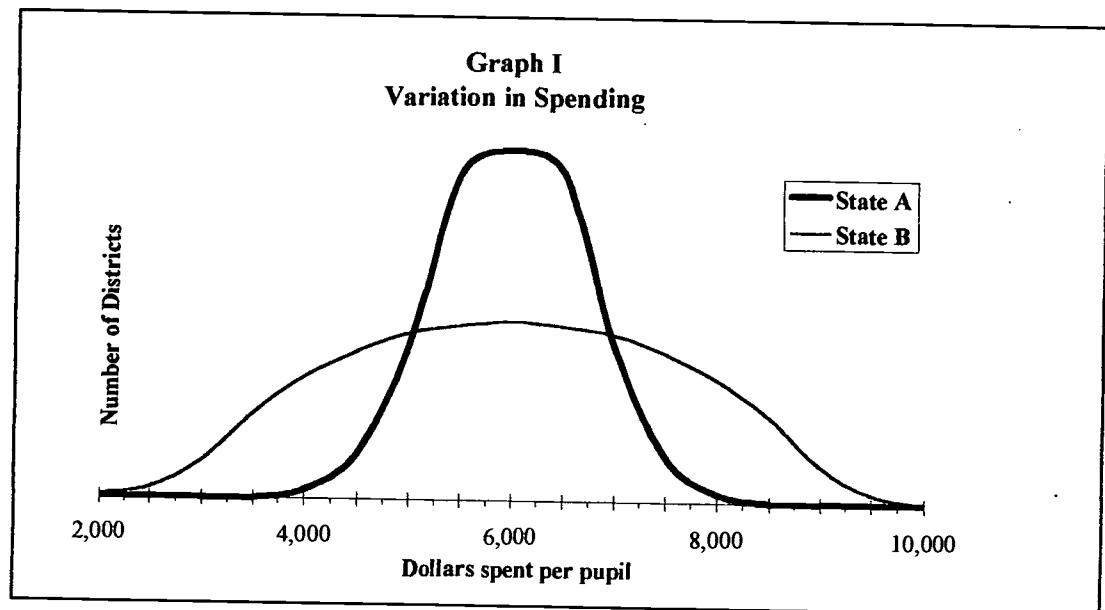
WARNING: THIS SECTION IS FOR THE DEADLY SERIOUS, ADVANCED ANALYST OR THE INTREPID AND TENACIOUS ACTIVIST. DON'T LET IT SLOW YOU DOWN. SKIM OVER IT AND CALL FOR HELP IF NEEDED.

The following are the most commonly used measures of equity:⁴

1. Average Expenditure

Typically, this is the arithmetic mean of school dollars spent on a per pupil basis. It can be quite useful in comparisons of spending levels between rural, suburban and other groups of interest. Changes in expenditures over time are also helpful.

Averages tell us something but not all we need to know about equities and inequities. When examining disparities in taxes or spending, look at how taxes and expenses *vary* both within and across groups. While there are special statistical definitions of variance, the concept is simply how much spending (or taxes or achievement) varies from one place to another. If the variation in spending between school districts in State A is \$4000 per pupil and the variation is \$8,000 in State B, then State A has less variation and a more equitable spending pattern (see Graph I below).



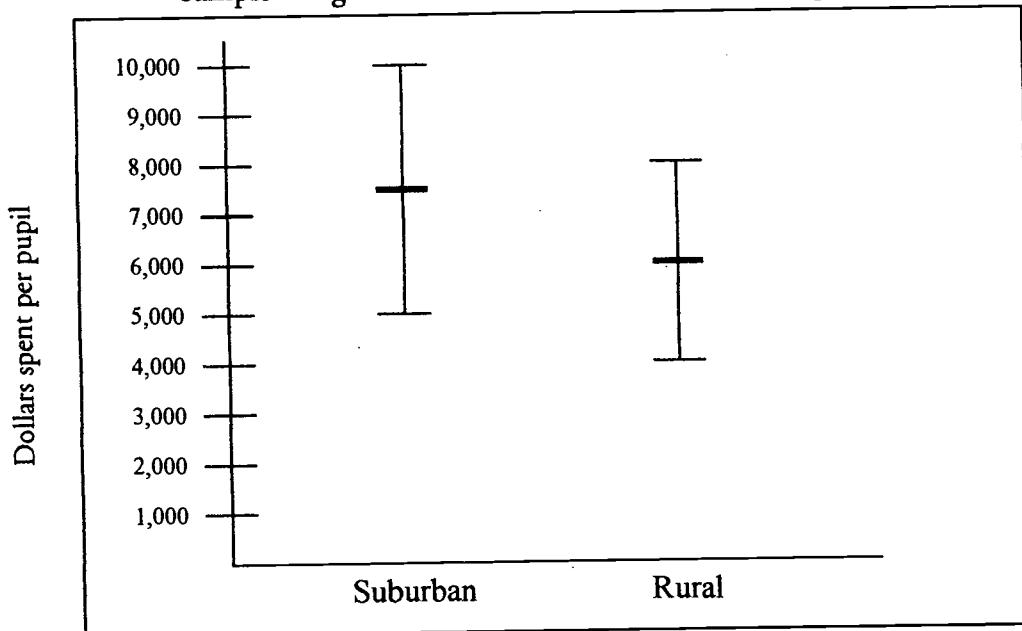
⁴ Look for reports on equity criteria from your legislative research staff, state department of education, federal government or school finance experts. This may save you considerable time and energy.

2. Range of Expenditures or Taxes

The range is the difference between the highest and lowest values (such as per pupil expenditures or local property tax rates) per district in the state. The greater the range, the greater the disparity and, therefore, the larger the inequities in the finance system. You can also look at ranges for different groups of schools—for example, the range between all rural schools as compared with all suburban schools. Charts with overlapping bands between groups are useful (see Graph II below).

The advantage of the range is that it dramatically illustrates differences between high and low expenditures or taxes. The disadvantage is that it is susceptible to extreme cases. A community with a taxable nuclear power plant would have high revenues, but it is so much higher than the next highest school that it distorts the overall profile of the system as a whole.

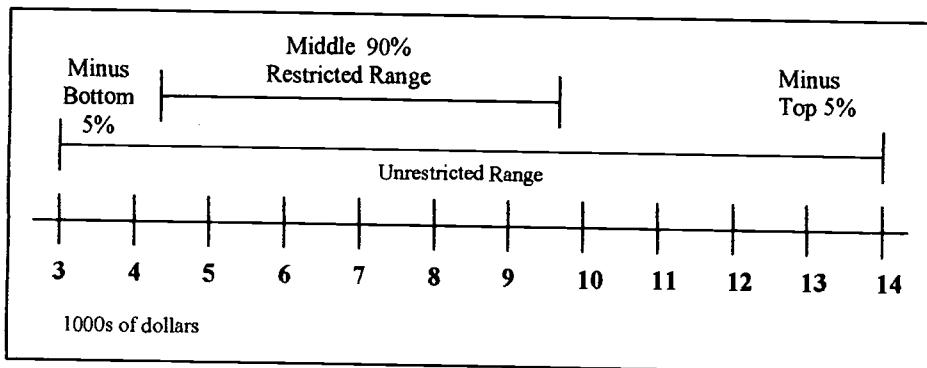
Graph II
Sample Ranges Within Suburban and Rural Groups



3. The Restricted Range and Federal Range Ratio (FRR)

To get around the problems of the unrestricted range, the restricted range was developed. The restricted range drops off the top and bottom five percent of the districts – the most extreme cases (see Graph III below).

Graph III
Sample Restricted Range



For example, it takes the per pupil spending of the district whose spending is higher than 95% of the districts (the 95th percentile) and then subtracts the per pupil level of the district whose spending is only higher than five percent of the districts (the fifth percentile). This difference is the *restricted range*. When this range is divided by the lower value (the fifth percentile), the resulting index is the Federal Range Ratio (FRR).

Highest Per Pupil Expenditure:	\$12,500
Ninety-fifth percentile:	8,300
Mean:	6700
Fifth percentile:	5200
Lowest spender:	4800

Unrestricted Range:	$12,500 - 4800 = \$7700$
Restricted Range:	$8300 - 5200 = 3100$
Federal Range Ratio:	$3100 / 5200 = .596$

In this case, the high spending district (which had only a small number of children and a large proportion of these had special education needs and were sent to special schools) is so high it pulls the unrestricted range to a high value of \$7700. The restricted range shows a lesser variation of \$3100 when the extreme cases are pulled out.

The Federal Range Ratio (FRR) gives a fairer picture of variation in school expenditures than the unrestricted range. In our example, a huge apparent variation in spending turns into a moderate Federal Range Ratio index. The lower the Federal

Range Ratio, the more equitable the distribution. In practice, a low FRR would be about 0.30 or less (high equity) while a high ratio could exceed 1.5 (large inequities). Table IV (next page) illustrates the use of the Restricted Range and the Federal Range Ratio on revenues for 1991-92.

The FRR is quite useful in telling how equitably the finance system is operating as well as how equity has changed over time. Likewise, it can be used to calculate inequities within and between groups. For example, how does the FRR (as well as the spending level) vary for lower socioeconomic and rural groups as compared with more affluent and suburban groups? The Federal Range Ratio can also be plotted in a "whiskers" chart such as Graph II.

4. Standard Deviation

This commonly used statistic provides a quick snapshot of the amount of variation within a group of districts. Two-thirds of the districts fall within plus and minus one standard deviation of the average (arithmetic mean). Ninety-five percent of the cases are within plus or minus two standard deviations. The larger the standard deviation, the larger the variation and the larger the inequities.

The advantages of using the standard deviation are that there is a broad conceptual understanding of the term (although few can compute it), and it considers all the cases in the state. The range, restricted range and Federal Range Ratio only consider the extremes.

The standard deviation can serve as a useful descriptive statistic when looking at disparities over time or for groups. For example, does the standard deviation grow larger (less equitable) or smaller (more equitable) over time? Is the standard deviation greater for rural groups than for the state as a whole? Is the standard deviation in your state greater than for other states?

5. Coefficient of Variation

A shortcoming of the standard deviation is that it is not sensitive to change over time. To illustrate, if the average goes up, the standard deviations are no longer comparable. Likewise, if different states spend at different levels, comparing standard deviations does not provide much information.

The coefficient of variation solves these problems.

It converts the standard deviation into a ratio by dividing it by the mean. Thus, this adjusts for changes in the scale of the numbers either within a state over time or as compared to other states.

	State A	State B	State C
Average (Mean)	\$8000	\$7000	\$6000
Standard Deviation	1000	950	900
Coefficient of Variation	.125	.136	.15

Looking only at standard deviations, State C would seem the most equitable as it has the smallest standard deviation with states B and A following in that order. But considering that the average spending varies considerably between these states, and that State C is well below States A and B, we reach exactly the opposite conclusion by looking at the coefficient of variation. State C has both the lowest spending level and the greatest difference between districts in spending level. Thus, State C has the greatest inequalities.

Perfect equity would have a coefficient of variation of zero. Coefficients below .11 represent the more equitable state systems while states with a value above .20 are among the most inequitable. Sometimes, in order to make the numbers easier to work with, the coefficient is multiplied by 100 (as is done in Table IV).

Guiding Questions #6:

The following measures are somewhat unique to educational finance. You may want to call the **Rural Education Finance Center** for help as you get into these specialty types of measures.

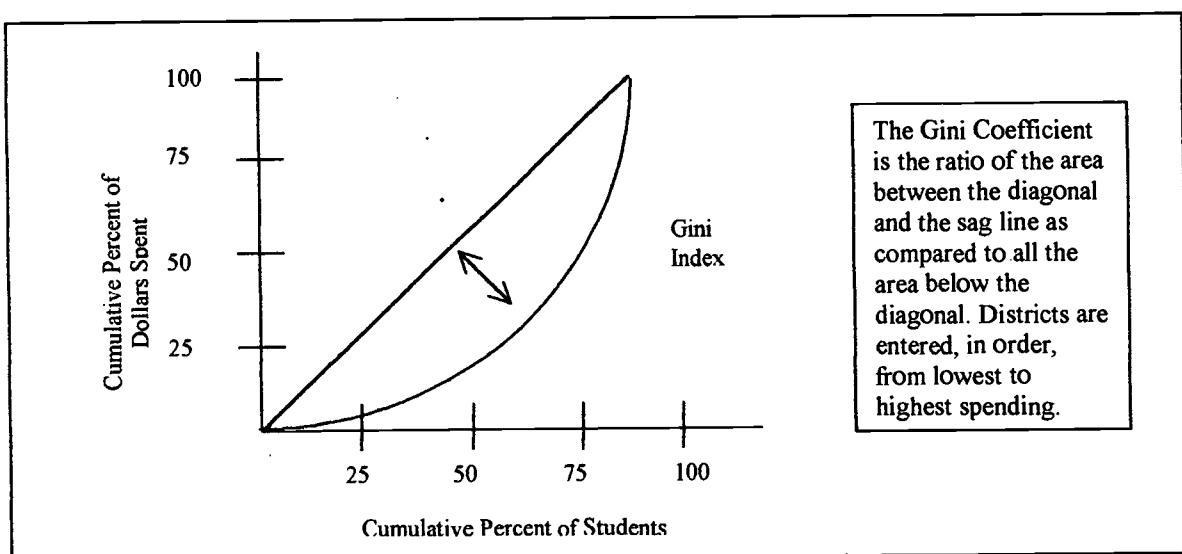
6. Gini Coefficient

The Gini coefficient is one of the most commonly referenced equity indices. A coefficient of zero indicates perfect equity and an index of 1.0 is perfect inequity. To calculate the coefficient, school districts are ranked from bottom to top on per pupil

spending (or tax capacity). The cumulative percent of pupils is plotted against the cumulative percentage of dollars. The resulting graph is called a *Lorenz Curve*. If complete equity exists, plotting cumulative dollars spent by cumulative students results in a straight diagonal line on the graph. But, in most cases, the Lorenz curve will be a line that sags below the diagonal line representing perfect equity (see Graph V, next page). The Gini Coefficient is a statistical indicator of the amount of sag. The greater the sag, the larger the Gini coefficient and the larger the inequities.

In practice, Gini coefficients range between 0.05 and 0.2 with a value less than 0.1 being desirable. The smaller the number, the more equitable the distribution. Gini coefficients for all states are illustrated in Table IV (p. 29).

Graph V
Sample Gini Coefficient



7. McLoone Index

The McLoone index looks at the bottom half of the distribution of spending (or revenues) in comparison with the median value. It compares the actual values for the bottom half of the distribution with what they would be if all were at the median level. This results in a ratio that ranges between zero and 1.0 with perfect equity being 1.0. In practice, values range between 0.8 and 0.95 with a value above 0.94 generally considered good. (See Table IV, p. 29). The index tacitly assumes the median is a good spending level, and does not address spending above this level or spending adequacy.

While there are many other equity measures, the above are the most frequently used. You may wish to use other measures but there is a trade-off between increasing sophistication and understandability by lay audiences and policy-makers. In other words, getting too fancy can be counterproductive.

A particular state may rank high on one measure and low on another. Thus, look at a number of different measures. Fortunately, most of these measures have been calculated for you in federal and state publications. The federal calculations are often dated but are computed using the same assumptions for all states. State generated equity reports vary in quality and range from being extremely complete to ragged. Use caution in comparing a state's calculations to the federal tables, as the state calculation will likely use a slightly different statistical definition. Small differences in definition can result in large differences in the equity indices.

Table IV (below) illustrates the calculations for these measures for all states using revenues as the indicator.⁵ For each statistical indicator, the states have been ranked in quartiles according to the degree of equity. A ranking of one means the state is among the most equitable and a ranking of four means it is among the least equitable on that measure.

Look at the rating for your state (note that these data are dated). Is your state at 2.5 or higher on the mean rankings? If so, your state has a pattern of inequity across the various indicators, which justifies political, if not court, action.

Before arriving at final decisions, make sure you have recent data and that you look at the various indices separately as well as together.

More recent nationwide calculations of many of these indicators are provided in "Quality Counts 2001" *Education Week*. Volume XX, No. 17, January 11, 2001. pp 102-105. These tables compare the financial equity and adequacy of the various states using data from 1997 through 1999. www.edweek.org

8. Correlational Studies

Correlation coefficients are a commonly used way of showing the relationship between variables such as the level of spending and the tax capacity of towns. They are easily explained to lay audiences and legislators. Coefficients range from -1.0 to +1.0. A coefficient of +1.0 indicates a perfect positive relationship and -1.0 indicates a perfect negative relationship. At +1.0 the two variables increase together perfectly. As one goes up, so does the other. At -1.0, as one goes up, the other goes down in exactly the same proportion. A correlation coefficient of zero indicates no relationship at all. Coefficients between zero and 0.3 (whether positive or negative) are considered weak while coefficients from 0.3 through the 0.7's are moderate. Numbers of 0.8 and higher are considered high.

Squaring a correlation coefficient tells how much of the variation in one measure is accounted for by the other measure. For example, a coefficient of 0.7 when squared results in 49% of the variance being accounted for by the relationship between the variables.

⁵ "Trends in Disparities in School District Level Expenditures per Pupil" provides far greater detail on numerous spending measures by state (NCES publication 2000-020).

Table IV Actual revenues: Equity measures, quartile rankings, and overall mean equity rankings by state: 1991-92

State	Restricted Range	Quartile Rank	Federal Range Ratio	Quartile Rank	McLoone Index	Quartile Rank	Coefficient of Variation	Quartile Rank	Gini Coefficient	Quartile Rank	MEAN RANK
Alabama	\$1,757	2	0.57	2	0.92	2	12.92	7	0.07	2	2.00
Alaska	\$8,545	4	1.24	4	0.95	1	36.46	4	0.16	4	3.40
Arizona	\$3,536	3	0.91	4	0.93	2	19.80	4	0.09	3	3.20
Arkansas	\$2,298	3	0.64	3	0.95	1	13.24	2	0.06	1	2.00
California	\$1,866	2	0.47	2	0.92	2	13.64	2	0.08	3	2.20
Colorado	\$1,957	2	0.44	2	0.95	1	13.54	2	0.07	2	1.80
Connecticut	\$3,828	4	0.53	2	0.92	2	13.69	1	0.07	2	2.40
Delaware	\$1,538	1	0.29	1	0.94	1	8.67	1	0.05	1	1.00
Florida	\$1,927	2	0.38	1	0.92	2	9.38	1	0.05	1	1.40
Georgia	\$3,050	3	0.80	4	0.91	3	18.03	3	0.10	3	3.20
Idaho	\$1,554	1	0.48	2	0.93	2	12.73	2	0.07	2	1.80
Illinois	\$5,449	4	1.51	4	0.82	4	31.18	4	0.16	4	4.00
Indiana	\$2,177	2	0.50	2	0.92	3	12.98	2	0.07	2	2.20
Iowa	\$1,465	1	0.33	1	0.94	1	9.18	1	0.05	1	1.00
Kansas	\$2,525	3	0.61	3	0.91	3	13.87	2	0.07	2	2.60
Kentucky	\$1,264	1	0.35	1	0.94	1	10.00	1	0.06	1	1.00
Louisiana	\$1,506	1	0.42	1	0.92	3	11.33	1	0.06	1	1.40
Maine	\$2,664	3	0.54	2	0.92	3	15.13	3	0.08	3	2.80
Maryland	\$2,690	3	0.50	2	0.94	1	13.41	2	0.07	2	2.00
Massachusetts	\$3,881	4	0.76	4	0.90	4	19.66	4	0.10	4	4.00
Michigan	\$4,096	4	0.93	4	0.84	4	21.32	4	0.12	4	4.00
Minnesota	\$2,939	3	0.61	3	0.93	2	15.91	3	0.09	3	2.80
Mississippi	\$1,253	1	0.44	2	0.92	3	11.78	2	0.07	2	2.00
Missouri	\$4,920	4	1.54	4	0.88	4	39.38	4	0.18	4	4.00
Montana	\$4,752	4	1.20	4	0.91	3	32.58	4	0.16	4	3.80
Nebraska	\$2,845	3	0.67	3	0.85	4	15.62	3	0.09	3	3.20
Nevada	\$1,283	1	0.27	1	0.94	1	7.70	1	0.03	1	1.00
New Hampshire	\$3,980	4	0.85	4	0.91	4	20.05	4	0.11	4	4.00
New Jersey	\$5,138	4	0.70	3	0.90	4	16.01	3	0.09	3	3.40
New Mexico	\$2,105	2	0.57	3	0.94	1	15.25	3	0.07	2	2.20
New York	\$5,123	4	0.76	4	0.98	1	20.66	4	0.10	4	3.40
North Carolina	\$1,698	2	0.42	1	0.93	2	11.26	1	0.06	1	1.40
North Dakota	\$2,344	3	0.66	3	0.90	4	18.47	3	0.09	3	3.20
Ohio	\$4,498	4	1.22	4	0.87	4	28.92	4	0.14	4	4.00
Oklahoma	\$1,556	1	0.46	2	0.92	3	13.06	2	0.07	2	2.00
Oregon	\$2,501	3	0.59	3	0.90	4	14.96	3	0.08	3	3.20
Pennsylvania	\$3,749	3	0.71	3	0.91	4	16.64	3	0.09	3	3.20
Rhode Island	\$1,951	2	0.36	1	0.92	3	9.74	1	0.05	1	1.60
South Carolina	\$1,523	1	0.39	1	0.93	2	10.43	1	0.06	1	1.20
South Dakota	\$2,262	2	0.68	3	0.92	3	18.75	3	0.09	3	2.80
Tennessee	\$1,955	2	0.71	3	0.87	4	18.20	3	0.10	4	3.20
Texas	\$1,566	1	0.36	1	0.93	2	10.69	1	0.06	1	1.20
Utah	\$1,277	1	0.42	2	0.98	1	15.81	3	0.07	3	2.00
Vermont	\$5,908	4	1.10	4	0.84	4	23.73	4	0.13	4	4.00
Virginia	\$2,912	3	0.68	3	0.92	3	20.19	4	0.11	4	3.40
Washington	\$1,984	2	0.41	1	0.92	3	10.99	1	0.06	2	1.80
West Virginia	\$1,028	1	0.21	1	0.95	1	7.16	1	0.04	1	1.00
Wisconsin	\$2,108	2	0.42	2	0.93	2	11.55	2	0.06	1	2.00
Wyoming	\$3,909	4	0.78	4	0.93	2	21.21	4	0.10	4	3.60

NOTE: All results are weighted by district enrollment.

SOURCE: Bureau of the Census, 1990 Census of Governments, Survey of Local Government Finances

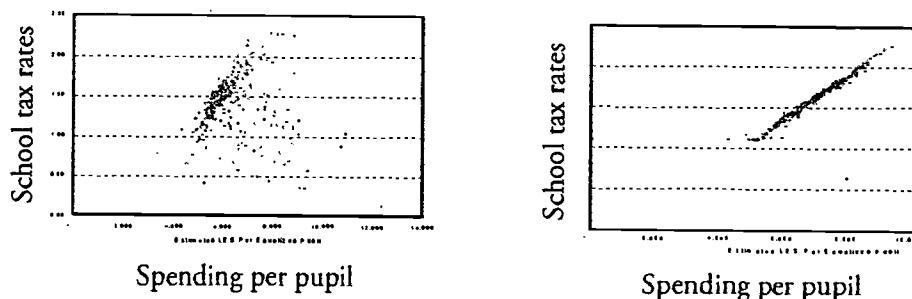
The correlation between state aid received and the wealth of a town should be high and negative. That is, the poorer the town, the higher the state aid. If the correlation is negative, but moderate or low, then the state aid formula is not working particularly well. If the correlation between wealth and aid is positive, then the rich are getting richer and the system is very inequitable.

9. Scatterplots

An illustration is sometimes worth a thousand coefficients. Plotting the variables is often an effective, visual communication tool.

The chart on the left shows the relationship between student expenditures and tax rates before reform. Notice that the scatterplot between taxes and spending is diffused. The chart on the right shows the relationship of the two variables after reform was accomplished. The post-reform relationship between taxes and spending is a practically a straight line which indicates near perfect equity.

Special reports by state agencies and by interest groups frequently use correlational analyses, scatterplots and graphs. Such techniques can highlight previously hidden concerns and should be part of any campaign for equity.



Matching Resources to Needs: Categorical Aids

A high quality education for all requires that different resources be available for different groups with different needs. As stated in the principle of vertical equity, the equal treatment of unequal is, inherently, unequal. That is, those with special needs should receive additional educational programs and financial support. These needs are defined within certain categories or groupings of students and, as a consequence, are known as categorical aids.

Categorical aid can be viewed as more than an issue of vertical equity. If the amount of aid provided is insufficient for the need, it can also be viewed as an adequacy issue (see Chapter 4).

Typically, districts receive extra money for each student who qualifies in the category. Examples of these programs are special education, compensatory education for social and economic deprivations (Title I), transportation, high schools, early education, bilingual, etc. In a number of states, categorical aids are established for small schools and rural schools.

A common method of funding is to count the number of eligible students within a district and give them an extra weight in the state aid pupil count. For example, each rural student would be counted as 1.25 students. The idea is that rural schools must pay a higher overhead per student in administration, transportation, facilities and the like.

Often, categorical aid will have a sliding scale. For example, the smaller the school (or class size) the greater the extra funds. The reason is that fixed costs are amortized over a smaller group of students. Likewise, transportation funds are frequently on sliding scales based on the average distance driven or the sparseness of the population.

A typical state could have categorical weights such as:

Elementary Student	1.0
High School Student	1.25
Bilingual	1.20
Social/Economic Deprivation	1.25
Special Education	Weights vary by handicap
Rurality/ sparseness	1.05 – 1.2
School Size	1.05 – 1.3
Transportation	1.04 - 1.07

Unfortunately, the way in which these additional amounts for special circumstances are determined is not always simple or rational. Sometimes, these weights are expressed as an extra weight for students, as a percent of school spending or as separate grants. The method is unique to the political history of the given state. Some states have a great number of categorical funds. Other states try to limit the number of such programs as they tend to become cumbersome and bureaucratic.

Like state aid levels, the weights and the number of categorical programs are subject to fierce debate and political horse-trading. Advocates for the handicapped call for making more children eligible, giving them broader entitlements and more funds. Those trying to keep spending and taxes low will argue to limit the entitlements. Currently, some western states question whether bilingual aid should exist. During the 1980s, California established so many categorical programs (27 of them) that they were politically driven to establish a new categorical program for districts that did not receive adequate funds under any other program. They were disadvantaged because they didn't have enough disadvantages.

When categorical programs are established, a new vested interest group emerges to both protect and enhance the favorable treatment of their class. This is true for driver education teachers, technical education, bilingual, and other programs as well as special education. Often, they end up competing with each other for a limited amount of resources.

Nevertheless, all states have categorical funding programs to some extent. The chief areas of interest for rural advocates are transportation, rurality/ sparseness, and small schools funds.

In examining categorical aid and assuring vertical equity, a few key factors are critical:

1. Size of the categorical multiplier

Does the size of the categorical fund represent a realistic estimate of the added costs? This begs a definition of just what the necessary costs happen to be. For example, we know that the needs of rural schools are higher but that spending in larger rural districts is lower than state averages. Is the lower spending in large rural schools due to (1) lesser amounts of monies available? (2) a reluctance to increase local taxes? (3) inadequate state funding coupled with an inadequate local tax base? or (4) greater efficiency?

Fortunately for rural advocates, a recent body of sound research has emerged that demonstrates that small schools have greater productivity, a stronger school climate, and categorical weights for poverty are woefully inadequate to meet the needs.

Unfortunately, the size of the categorical multiplier is as much influenced by the politics of the day as it is by objective definitions of need. Thus, for rural advocates, strong analysis of needs must be accompanied by a political strategy. If you need help in defining needs in your state, please call the **Rural Education Finance Center**.

2. Sliding scales

Sliding scales are sometimes used for categorical funds. Population sparseness can be used to determine small school aid and transportation aid. While there are many types of sliding scales, a small schools example based on the average number of students in each grade in a school is:

0 – 7 students	1.19
8 – 15	1.15
16 – 25	1.07

In this case, the school with seven or fewer students would receive 19% more basic grant money for each student. For small and rural schools on the brink of financial insolvency, these aids can make the difference in survival. In this illustration, the size of the additional aid does not generate enough money to pay for the overhead or fixed costs. Examination of the adequacy of sliding scales is important. Call the **Rural Education Finance Center** if you need help.

3. Expenditure displacement

When the amount of additional aid does not cover the actual costs for maintaining small schools or transporting students, the money to provide these services must come from some other place.

For example, we know that about 61% of school budgets are spent on "direct instruction." If your percentage spent on direct instruction is less than 61%, then

you may be taking away money from teaching children to provide for plant maintenance, administrative expenses, transportation or meeting special needs.

Each state collects data using uniform methods. Check your state average in key areas such as direct instruction, indirect instruction, operations and maintenance. See how your rural areas compare to your state averages. Are they diverting a greater proportion of funds into support activities? This can be a powerful political and court argument.

4. How was the size of the multiplier determined?

Go to the state education agency or the legislative research offices and see if analytic studies justified the size of the multipliers. See how recently the studies were conducted. Do not be surprised if little or weak documentation exists.

If the multipliers were arbitrarily determined and if they bear little relationship to actual costs, this may open political or court avenues. The argument that can be raised is that the funding is not rationally related to a compelling state interest and that the system is not vertically equitable.

5. Socioeconomic variables

The strongest predictors of educational performance (and, thus, of educational need) are socioeconomic factors. Poverty is highly related to both rural and urban educational achievement. In fact, home environment, community environment, parents' education level and poverty are the most important factors in determining whether a child succeeds in school or goes on to higher education.

Unfortunately, the strength of these factors is not adequately recognized in either state aid formulas or high stakes accountability systems.

To a limited degree, state aid formulas recognize the importance of socioeconomic variables; the poorer the community, the greater the state aid. However, state aid averages only about half of school expenditures for the nation as a whole. Further, all states measure community wealth primarily by property wealth, that has only a moderate relationship with needs.

The federal Title I program and many states have their own poverty weights or formula variables. Typically, these weights add an additional 0.20 to 0.25 to the student count. It is generally agreed that the combined general state aid along with the federal and state poverty factors fail to generate enough money to overcome the added needs and demands of poverty.

Properly meeting the needs of low socioeconomic groups, be they urban or rural, has been an implicit or explicit argument in most school finance litigation. Examining the adequacy of your state formula in meeting the needs of the poor is a critical factor.

Guiding Questions #7

The first determination is whether recent and appropriate equity analyses have been conducted for your state. If yes, do they show a pattern of inequality as measured by the criteria?

If such analyses have not recently been conducted, ask yourself if you have the expertise, interest and time to conduct these (and follow-up) analyses. If no, discuss with your network contacts to determine who would be qualified and interested in conducting these analyses. If you need help, call the **Rural Education Finance Center**.

If analyses have been conducted in your state, you will need to examine the results and see where you want to focus. For example, spending equity, distribution of revenues, tax fairness, and/or unequal treatment of rural populations.

While not addressed here, related issues include fairness of property tax administration dealing with issues such as appraisals, tax caps, market values, etc.

Chapter 4

Educational Adequacy

During the 1990s, the "adequacy" of a state's school finance system emerged as a critical factor in court decisions. State Supreme Court decisions found funding systems unconstitutional at a two-to-one rate. Rebell credits this court success to the emergence of adequacy criteria in determining the constitutionality of a state system.

The concept is that the state has an obligation to assure an adequate education to all children. If the system is inadequately financed in general, or for particular groups such as rural populations, then the finance system is arguably unconstitutional.

Under an adequacy argument, a state's school finance system may be perfectly equitable – everyone gets the same treatment – but it may be too low to provide a sufficient and necessary education to a group of children.

Claiming that states must provide an "adequate" level of support runs the risk of this "adequate" level being defined at a very low or sub-minimum level. But, the adoption of "high standards" and "high stakes assessment" by state governments has helped litigants and advocates demonstrate that the state's expectations and obligations are much higher than a minimal level of funding can provide.

Several state high courts have ruled that schools must prepare all students to be contributing members of society. The difference is that the needed level of knowledge in a cyber-technology society is much greater than it was for a 19th century agrarian or 20th century industrial society.⁶

By 2001, 49 states had some form of state testing program, with about two-thirds of the states using a high-stakes school accountability model. About half the states have tests for student graduation or promotion. The argument for adequate financial support became simplified: The state has the obligation to provide adequate funding to enable all students and schools to reach the goals mandated by the state.

As logical and persuasive as this reasoning, it is difficult in practice. Tax and spending equity are far easier to measure than educational adequacy. There must be some demonstrable or measurable criteria or standards for adequacy. On one side, reform proponents argue that standards for an educated citizen must be both high and broad. They further argue that the state has not provided sufficient resources to meet their own standards and that the educational needs for rural, poor and deprived children are much higher than those of their suburban peers. On the other side, defendants contend that the guarantee either doesn't exist at all or, if it does, it is at a very minimal level. Sometimes, defendants will argue that sufficient money exists and that it simply has not been used properly by the schools.

⁶ Rebell, Michael A. "Fiscal Equity Litigation and the Democratic Imperative." *Journal of Education Finance*, 24 (Summer, 1998), 23-50.

Adequacy and Constitutional Entitlements

In any legislative or judicial reform campaign, state constitution provisions come into play. Before the 1990s, court cases primarily focused on "equal protection" (fair taxation) clauses and education clauses. Summaries of the cases in your state and other states can be found at the websites listed in Appendix C.

How constitutional language has been interpreted through the courts of the state is critical. The range has been broad. Kentucky's interpretation in 1989 resulted in massive reforms based on adequacy arguments. New York's earlier decision simply said that a citizen had to be able to sit on a jury and to vote. The later 2001 New York decision used this criteria to demonstrate that today's juror may have to understand complex DNA evidence or follow a complicated money trail. This interpretation established a much higher standard of adequacy.

The New York case also demonstrated the importance of tying equity and adequacy arguments together. The court also said it is unfair for New York City students to have \$2000 less per pupil (equity) particularly as the necessary level of education needed today is much higher than what was needed in an earlier age (adequacy).

Another theme of the New York case and also found in cases in Kansas, Alaska, Florida and California is a claim that under-funding disproportionately harms poor and minority students and is thus discriminatory, and in violation of Title VI of the federal Civil Rights Act.

An early step in your adequacy analysis is to examine constitutional clauses and how they have been interpreted in the courts of your state. Your constitutional language may focus your efforts toward an adequacy case, an equity case, a civil rights case or a combined case. If your constitutional language appears weak, this does not mean that you should abandon your efforts. Often, what seems to be weak language is interpreted differently in the courts.

Defining Adequacy

"Educational adequacy" must be defined in concrete terms that specify what it takes to provide adequacy. Adequacy requires criteria. This is where issues become complicated and individual judgments vary.

The roots of adequacy arguments are found in "foundation" type funding formulas which are used by about two-thirds of the states. That is, a foundation amount of money is guaranteed for each student.⁷ In practice, these minimums are generally low and have been increasingly rejected by the courts as being far below an actual or realistic adequacy level. In 1997, the "implicit foundation levels" ranged from \$723 per pupil for New Hampshire to \$5,109 in Hawaii.

⁷ A few states use an "instructional unit" approach. Instead of calculating how much money is needed for each student, these states figure how much it costs to run a classroom with a certain number of students, a teacher and a designated amount for support services, supplies, utilities and the like. Since this base unit has a certain number of students, the dynamics of determining these costs are very similar to foundation processes.

Typically foundation levels were set by the state defining a desirable student-teacher ratio, a desirable or average teacher salary, a set amount for textbooks and supplies, a figure for maintenance, administration, overhead, and all other expenses.⁸ After all the costs were estimated, these building blocks were added together to determine a minimal per pupil or per instructional unit cost. This became the foundation figure.

Unfortunately, foundation levels were low and these deteriorated due to changes in the internal formula factors, failure to keep up with inflation, retrofitting of appropriations level, politically holding the foundation level low and increasing the necessary local tax rate.

While some courts have held to the old minimalist standard, recent adequacy cases have focused on demonstrable differences in educational content and learning resources available to some schools but not to others. The resulting differences in educational outcomes are increasingly being linked to lack of adequate resources.⁹ As Dayton has pointed out, examining what exists inside the schools can provide powerful testimony in the courts.¹⁰

There are three fundamental ways of defining adequacy:

1. The Professional Judgment/ Market Basket Approach

Seven states have recently employed this approach with the work of Guthrie and Rothstein in Wyoming being the most prominent.¹¹ Basically, a team (or teams) of professional educators determine what is needed to educate a child to the defined state standards levels. Once the team processes are complete, costs are computed for each of the elements. In many regards, the procedure is similar to foundation determinations. Obviously, the result will depend upon who the experts are and the values they hold. The result is a single number that is applied to all the districts in the state regardless of differences in needs or differences in costs.

To get around the problem of the same costs for different needs, Allen Odden proposed five items to be put in his market basket, items that would vary by the needs of the district. These items are (1) an adequate base plus the full cost for educating, (2) low socioeconomic children, (3) special education children, (4) English Deficit children, and (5) a realistic cost of living adjustment.¹²

2. The Model District Approach

This approach identifies a set of districts that are meeting the state's performance goals and then determining the costs those districts paid. In this type of analysis, used

⁸ Some states foundation level has no discernible link to even minimum adequacy levels.

⁹ Verstagen, Deborah A. "Judicial Analysis During the New Wave of School Finance Litigation: The New Adequacy in Education." *Journal of Education Finance*, 24(Summer, 1998), 51-68.

¹⁰ Dayton, John. "An Examination of a Judicial Treatment of Rural Schools in Public School Funding Equity Legislation" *Journal of Educational Finance*, 24 (Fall, 1998), 179-205.

¹¹ Guthrie, J.W. and Richard Rothstein "Enabling Adequacy to Achieve Reality: Translating Adequacy into State School Finance Distribution Arrangements." *Equity and Adequacy in Education Finance: Issues and Perspectives*. Washington, DC: National Academy Press, 1999.

¹² Alan Odden, American Education Finance Association, March 2001.

by Auginblick and Myers in Ohio, districts with very high or very low property wealth and school spending were eliminated.

In this case, the number was later manipulated downward in the legislature as policymakers decided that certain elements were not necessary and they wanted to save money. In the Ohio case, the legislators' disregard of their own experts led to the system again being declared unconstitutional.¹³ (Other models are subject to political manipulation, as well).

3. Statistical Models

Jay Chambers has demonstrated that adequate funds for the North Slope in Alaska are not the same as adequate funds in Central Pennsylvania or North Carolina. Teacher salaries, land costs, crime, student needs, and a host of other variables make a single adequacy number inapplicable to all cases. Different schools need different levels of resources.

Yet, cost differences by themselves do not tell us if the students are meeting the state's standards. To address this problem, Reschovsky and Imazeki considered both the differing external cost factors and achievement test gains (value added) in Wisconsin and Texas. They statistically developed funding formulas to maximize achieving high standards while adjusting for local differences in cost.¹⁴

While an elegant solution, the complexity of such models and the political difficulty of having different amounts flow to different districts would likely prove troublesome. These models are only now emerging and their considerable promise is yet to be seen.

Other models have been proposed for defining adequacy including what an unfettered market would pay and what level would gain median voter support. Arguably, the median voter approach is in place in states where citizens annually vote on their school budget.

The model district and professional judgement models offer the most immediate short-term possibilities for adequacy approaches.

When Would You Use the Adequacy Criterion?

While Rebell and others point to adequacy cases as the wave of the future and showcase a high success rate in the courts, equity cases are far easier to define, quantify and prove. Adequacy requires the plaintiffs to establish and prove that an adequate education is systematically denied

¹³ Carla Edlefson. "Ohio: DeRolph II." School Finance at the Start of the Millennium. Proceedings of the 2000 Annual Meeting of the American Research Association Fiscal Issues, Policy and Education Finance Special Interest Group. Seattle: University of Washington.

¹⁴ Reschovsky, Andrew and Jennifer Imazeki. Achieving Educational Adequacy Through School Finance Reform. Consortium for Policy Research in Education. University of Pennsylvania. RR-045, October, 2000.

to children. Absent specific state definitions of standards, different people disagree on what is an adequate education.

In most situations, combining equity and adequacy arguments is the best approach. A civil rights approach can also strengthen the case. You may want to pursue an adequacy case if one or more of the following conditions exist:

- Your constitution has a phrase such as all children are entitled to a "thorough and efficient" or "free and appropriate" education.
- Your state has established high stakes assessment and learning expectations that have consequences for the school and/or the student.
- Your state lost an equity case – Adequacy may provide another bite at the apple under different constitutional clauses than the original case.
- Your state spending level is very low compared to the nation.
- You have a state school-funding share below 50%.
- There is a large percentage of schools and districts whose education spending is below \$5,000 per pupil.
- There are large disparities in spending between districts.
- There are large disparities in spending between rural and suburban groups.
- Your support services and teacher salaries are well below state averages.
- Your modern computer-to-student ratio is well below state averages.
- A large percentage of rural districts have inadequate facilities.

See *Education Week's*, "Quality Counts 2001" for state levels and comparisons on many of these issues. See state and national information for additional data.

Advantages and Disadvantages of Adequacy Approaches

Advantages:

- An adequacy approach may result in higher levels of state support and funding than would be possible using an equity approach. For example, New Mexico has one of the more equitable state systems but the funding level is quite low and is, arguably, inadequate.
- Adequacy approaches consider the new knowledge and higher levels of learning required in today's world.

- Adequacy arguments may have a stronger legal and constitutional foundation in your state than equity arguments.
- An adequacy argument may open up new avenues for pursuing *vertical equity* issues such as the added costs of transportation, small schools, facilities and overhead of rural schools.

Disadvantages:

- Defining and costing adequacy can be difficult and cumbersome.
- The notion of what is adequate is subject to political tinkering. Adequacy levels may be eroded in ways similar to foundation programs.
- Adequacy amounts may differ by location.
- There is limited consensus on the true costs of serving children in poverty, special education, rural areas and the like.

Guiding Questions # 8

At this point, gather the information you have on your state. Consider how the courts in your state interpreted the state constitution and the legal requirements. Has an equity or adequacy case been brought? What have been the results? What has the court not addressed? Make preliminary judgements on the following set of questions:

- Equity – Do the indicators show a pattern of inequity in my state?
- Adequacy – What is the state share of education expenses? What is the average expenditure per pupil? Is it sufficient to meet the needs?
- Civil Rights – Does the financial support system in my state have the effect of systematically discriminating against the poor and minorities?
- Rural Needs – Does the state funding system provide vertical equity through categorical funds for rural students by sufficient allowances for factors such as transportation, sparcity, small schools, and poverty?
- Special Needs – Are there other groups who are denied the resources they need?

If the answer to any of these questions is "yes," you will most likely have good grounds to proceed. If you are uncertain, call on your network and/or the **Rural Education Finance Center** to review the data with you or determine if special analyses are needed.

Chapter 5

Changing the System

The purpose of this booklet is to assist you in determining if there are school funding equity or adequacy issues in your state. If there are concerns, then a reform strategy is indicated. The elements of these strategies all represent lengthy topics within themselves that are well beyond the scope of this booklet.

If you found a pattern of inequity or inadequate funding, the next step is determining the most appropriate and expedient path for obtaining a remedy.

Opinions vary as to whether a judicial, political or public information campaign is the most effective. Some argue that a failed court action will set back reform for decades. Others contend that the legislature will not act without a court mandate. Still others say that political solutions will not occur unless broad public support demands action by the legislature. There is no simple answer. Consult with your network regarding strategies. Most likely, you will need elements of all three strategies.

When deciding which path to follow, the political dynamic within your state will be the deciding factor.

The Legal Strategy

Some analysts say that a court order or the threat of a court order is an essential condition. A favorable legislative and gubernatorial composition is not enough. Even when there are favorable circumstances, school finance reform can be thwarted by financial limitations, the reluctance to change from local to state taxes, massive shifts in revenue sources, and the competition from other demands on state government.

If exploring a legal challenge is part of your strategy, consult with your legal network. Speak with the plaintiffs and attorneys in previous cases. About half the states have a case in court, at some level, at any given time. The most expedient path may be for you to join with people of a common interest. Most likely, you will need each other's skills and support.

If there is no active suit in your state, talk with the state school boards association, school administrators associations, teachers associations, the state ACLU chapter, and a state-level Public Interest Research Group about the feasibility of such an effort and ask for names of qualified attorneys. If the attorneys are willing to work *pro bono* or for costs, then a major financial hurdle will be cleared. Ask the various groups if they are willing to contribute money and/or staff support. You may need to go to foundations. In all cases, you will need to convince potential supporters that your initiative represents a legitimate and worthy effort. To do this, you will need the backing and support of key constituencies and organizations.

You will need plaintiffs who represent the students, school districts and taxpayers who are aggrieved by the current situation. Otherwise, you will not have standing. This is often as simple

as talking with your networks and recruiting local school boards through information sessions. Your network can assist in identifying plaintiffs.

Given the various levels, hearings and procedural issues, court cases unfold over a period of years. Also, delays and postponements are the rule. After hearing the case, the court may reach a decision quickly or it may be quite slow. Make sure your student plaintiffs are young so that they will not have graduated and rendered the decision moot by the time the Supreme Court rules.

Developing the steps and details of the legal strategy are beyond the scope of this booklet. Contact the **Rural Education Finance Center** if you need assistance, a referral or guidance.

Political or Legislative Remedies

It is one thing to win in court. It is yet another for a legislature to deliver a timely and sufficient remedy. In some cases, solutions have been quite rapid and, in others, the legislature has delayed until prodded by subsequent court actions. In still others, legislatures have delivered very weak responses to court orders. A great deal depends on the composition of the legislature, the quality of the leadership, political factors, and the economic condition of the state.

In concert with your network and interested groups, identify the key committees that are charged with crafting a solution. These will generally be the revenue committees (Ways and Means, Taxation), appropriations and education committees. A special committee may be appointed in some circumstances. Identifying the key members of these committees and their constituencies becomes essential.

An orchestrated campaign of working with the legislators is necessary. In most cases, outside expert testimony will prove valuable, if not essential. The **Rural Education Finance Center** can help you arrange this expertise. Technical expertise may be required for drafting model legislation, developing formulas, identifying needs and the like. While fair and adequate funding is the goal, the process is political. Horse-trading is part of the process. The greatest caution is that too much can gut the bill.

Eventually, the bill has to be approved by the various committees, both houses, and signed by the Governor. In turn, the new law is given to the tax departments and the education department to implement. Often, state regulations have to be drafted by the state board of education or by the affected departments. These seemingly procedural issues can critically effect the outcomes. You will need to monitor these later stages.

Public Information Campaigns

Some argue that legislatures do not act unless there is considerable public support behind the idea. Public opinion campaigns are important both for building support for court actions and, ultimately, for building political support for a legislative solution (most often, courts do not fashion solutions).

Across the nation, rural students represent about 27% of the student population. Different states have different mixes. More than likely, this means that rural interest groups need to combine with urban groups and other key actors to develop an adequate political voice.

The nature of the public information campaign will vary according to the stage in the process. It is most essential during the legislative formulation stage. Legislators must hear from their constituents. News conferences, special reports, letters to the editor, opinion articles and the lobbying of key legislators by local residents is needed.

Maintaining the Remedy

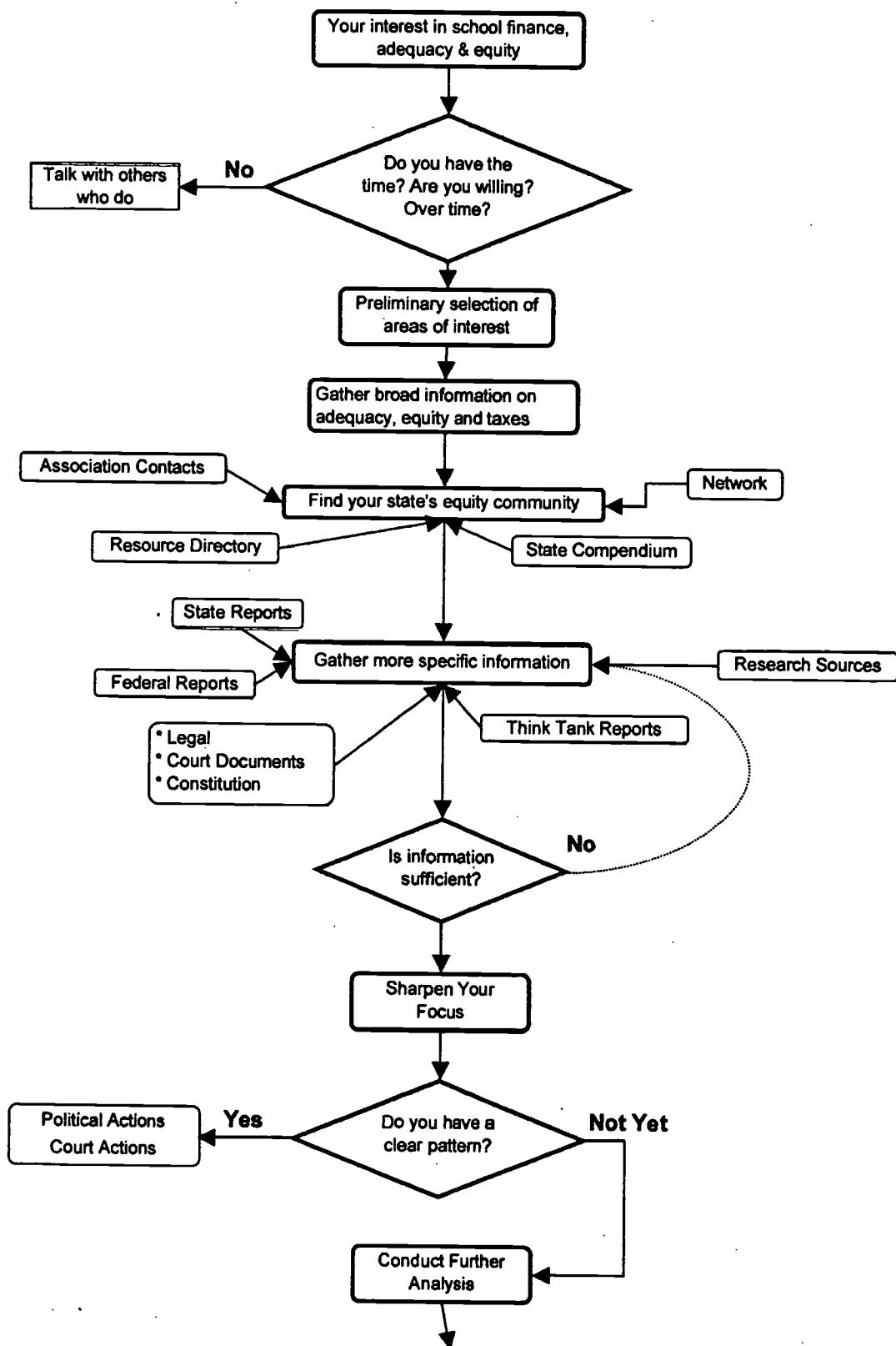
Unfortunately, remedies do not last forever. State aid shares deteriorate, economies weaken, circumstances evolve, and political power shifts. People with interests other than yours will argue that their interests should receive favorable treatment. All state aid formulas have a limited life. A formula that lasts for more than 15 years is old.

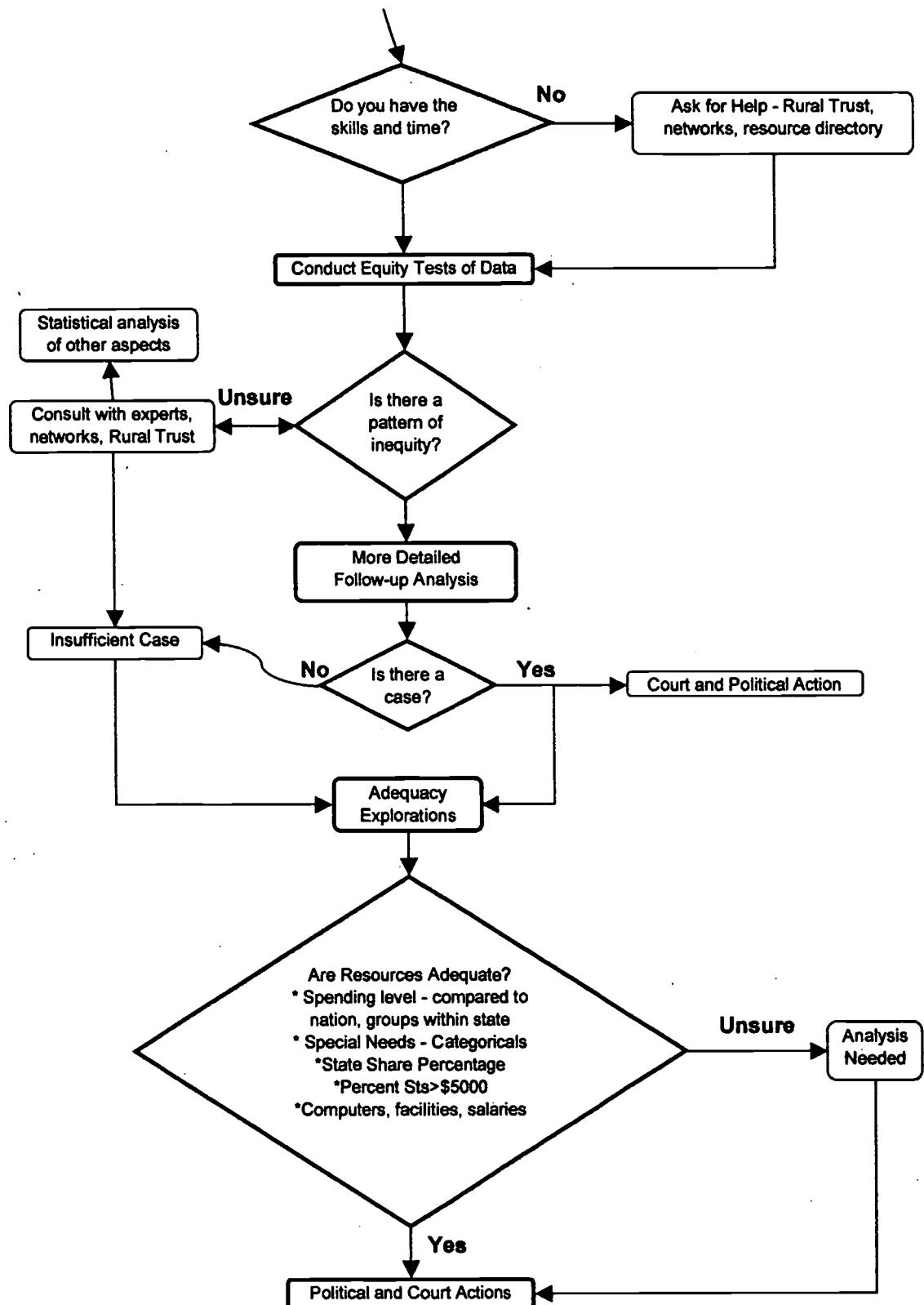
Consequently, your state's educational finance system must be constantly monitored if we are to assure both an adequate and an equitable education system for our children.

Appendix A

Step by Step Flow-Chart

for Analyzing your State Finance System





Appendix B

Authors of State Descriptions of Educational Finance Systems

State	Author	Affiliation	Position
Alabama	Harvey, Ira	UAB	Professor
Alaska	Berman, Matthew	U of Alaska	Prof of Economics
Arizona	Richardson, Judy	Arizona DOE	
Arkansas	Schoppmeyer, Martin	U of Arkansas	Prof of Education
California	Picus, Lawrence O.	U of S. California	Prof of Education
Colorado	King, Richard, A.	U of Northern Colorado	Professor
Connecticut	Brewer, Robert	CT DOE	Director
Delaware	Nakib, Yasser	U of Delaware	Professor
Florida	Wood, R. Craig	U of Florida	Professor
Georgia	Sielke, Catherine	U of Georgia	Professor
Hawaii	Thompson, John A	U of Hawaii	Professor
Idaho	Nicholson, Rob	Idaho EA	Research Director
Illinois	Johnson, Donald	U of Northern Illinois	Professor
Indiana	Theobald, Neil	IU	Professor
Iowa	Tack, Leland	Iowa DOE	
Kansas	Thompson, David C	Kansas State University	Professor
Kentucky	Murray, Sheila	UK	Professor
Louisiana	Geske, Terry G.	Louisiana State University	Professor
Maine	Watkins, James	State DOE	Professor
Maryland	Rice, Jennifer	U of Maryland	Professor
Mass.	Hatch, Roger	MA DOE	Director of Finance
Michigan	Addonizio, Michael	Wayne State University	Professor
Minnesota	Mueller Van D.	U of Minnesota	Professor
Mississippi	Johnson, Gary	Mississippi State	Professor
Missouri	Ogle, Geraldine	Missouri DOE	Director, Schl Fin
Montana	Quinlan, Madalyn	Montana DOE	Revenue Analyst
Nebraska	LaCost, Barbara	U of Nebraska-Lincoln	Professor
Nevada	Noonan, David	UN – Reno	Professor
New Hamp.	Michener, Dean R.	N.H. Scl Bds Assoc – UNH.	Dir of Inform Servs
New Jersey	White, John	New Jersey Legislature	Analyst

State	Author	Affiliation	Position
New Mexico	Garcia, J. Placido Jr.	Legis Ed Study Comm.	Retired
New York	Brent, Brian	SUNY- Rochester	Professor
N. Carolina	Brown, Carven	North Carolina State Univ	Professor
North Dakota	Bass, Gerald	U of North Dakota	Professor
Ohio	Sweetland, Scott	OSU	Professor
Oklahoma	Maiden, Jeffrey	OU	Professor
Oregon	McNamara, Frank	Oregon DOE	Coordinator
Pennsylvania	Hartman, William	Penn State	Professor
Rhode Island	Bilotti, Celeste P.	R. I. DOE	State Aid Specialist
S. Carolina	Tetrault, Donald	U of South Carolina	Professor
South Dakota	Char Gatje	So Dakota EA	
Tennessee	Peevely, Gary	Tenn Univ	Professor
Texas	Clark, Catherine	Texas Ctr for Ed Research	Director
Utah	Galvin, Patrick	U of Utah	Professor
Vermont	Mathis, William J.	U of Vermont	Adjunct & schl supt
Virginia	Dickey, Kent	VA DOE	Dir, School Finance
Washington	Plecki, Margaret	U of Washington	Professor
West Virginia	Panetta, Joe	WV DOE	Asst Dir, Schl Fin
Wisconsin	Loppnow, David	WI Legislative Fiscal Bureau	Director
Wyoming	Chris Christensen	Wyoming EA	Professor – retired
Wash, D.C.	Rickford, Donald	DC Schools	Chief Fin Officer
Guam	Cruz, Jose	U of Guam	Professor

Appendix C

Annotated Index to Resources and References

Websites

- Adequacy and Equity
 1. Clearinghouse on Educational Management – Summary of Equity and Adequacy research by Margaret Hadderman
<http://eric.uoregon.edu/publications/digests/digest129.html>
 2. "Quality Counts 2001" *Education Week*. Volume XX, No. 17, January 11, 2001. pp 102-105. Tables are presented on each state using standard measures of adequacy and equity. Data are drawn from 1997 through 1999. States are easily compared as well as your state's standing compared to the nation.
<http://www.edweek.org>
- Compendium of State Finance Programs – (see Public School Finance Programs)
- Constitutional and Legal Issues
<http://eric.uoregon.edu/publications/digests.html>
- Databases

National Center for Education Statistics – The key federal database and information source with numerous links to databases, studies, categories of interest, litigation, etc.
<http://nces.ed.gov>

Site map of NCES papers and reports by topic
<http://nces.ed.gov/help/sitemap.asp>

For Finance:
<http://nces.ed.gov/edfin>
- Databases (State)

On the Web (40 available as of 4/2001 – some dated)
<http://www.wcer.wisc.edu/cpre/>

- Databases

Common Core of Data (CCD) – This is the motherlode of national school finance statistics in raw form. It is available from NCES (see above) and on CD-ROM. It is comprehensive but suffers from ragged data, complexity, and the data is inevitably a few years old by the time it is compiled from all states.

- Descriptions of State Systems – (see Public School Finance Programs)

- Educational Finance Organizations

American Educational Finance Association
<http://www.ed.sc.edu/aefa>

American Educational Research Association
<http://www.aera.net>

AERA's Fiscal Issues, Policy, & Educational Finance (FIPER) Special Interest group
<http://www.ed.sc.edu/drt/fiscalsig/index.html>

- Education News

Summaries of newspaper articles from around the nation with hyperlinks.
<http://www.smartbrief.com/ascd>

Weekly newspaper of education interests. Has good searchable archives.
<http://www.edweek.org>

- Education Research Findings

The ERIC system is the standard compendium for educational research findings from key publications as well as professional presentations. An extensive and searchable set of summaries and references.
<http://www.askeric.org/>

Summaries of literature on key school finance trends and issues (and other topics).
http://eric.uoregon.edu/trends_issues/finance/index.html

- Encyclopedia of Educational Statistics
<http://nces.ed.gov/edstats/>

- Equity – See Adequacy and Equity

- Federal reports
<http://nces.ed.gov/>
- Finance Organizations (see Educational Finance Organizations)
- Litigation
Of state finance systems summary
<http://nces.ed.gov/edfin/Litigation/Contents.asp>
- National Center for Education Finance
Newly established office by the National Conference of State Legislatures to track national school finance issues and trends.
<http://www.ncsl.org/programs/edu.html>
- News – See Education News
- Reform Efforts
National Center on Increasing the Effectiveness of State and Local Education Reform Efforts – Center for Policy Research in Education – University of Pennsylvania, and University of Wisconsin, Madison
<http://www.upenn.edu/gse/cpre>
- Rural Education and Small Schools
Website – at the Appalachian Education Laboratory
<http://www.ael.org/eric/rural.htm>
- Rural Schools
Navigating Resources for Rural Schools
<http://nces.ed.gov/surveys/ruraled/>
- Rural School and Community Trust
Nonprofit organization concerned with rural education, equity and finance issues.
<http://www.ruraledu.org>
- Rural Affairs, Center for
Nebraska based organization; <http://cfra.org>

- School level
Some data on the school level is available through NCES' Common Core of Data (see Databases). Some fourteen states have school level data on the web and many have school level "report cards." Consult your state's website at:
<http://gov.state.us> (Your state's two letter postal abbreviation)
- Small and Rural School Districts Characteristics
NCES Statistical Analysis Report, May 1997 (NCES-97-529)
<http://nces.ed.gov/pubs97/97529.html>
- Small Schools
"Small Works: School Size, Poverty, and Student Achievement." Rural School and Community Trust, February 2000.
www.ruraledu.org or email policy.program@ruraledu.org
"Current Literature on Small Schools" by Mary Ann Raywid
<http://aelvis.ael.org/eric/digests/edorc988.htm>
- Special Education Finance
Center for Special Education Finance
<http://csef.air.org>
- State Statistical Profiles
Provides state level summaries as well as access to district and school data (limited) and statistics.
<http://nces.ed.gov/pubs2000/stateprofiles/>
- State Websites – [http://gov.state.\(your state's two letter postal code\).us](http://gov.state.(your state's two letter postal code).us)

Books and Monographs of Special Interest

- Adequacy

"Improving State School Finance Systems: New Realities Create Need to Re-engineer School Finance Structures." Determining an adequate level of funding for base education and for special needs. Preliminary analysis on how much is needed under certain circumstances. Emphasis on poverty, bilingual and handicaps.

Allan Odden, CPRE Publications (OP-04), University of Pennsylvania, 3440 Market Street, Suite 560, Philadelphia, PA 19104-3325 \$6.00 (215) 573-0700

"Equity and Adequacy in Education Finance: Issues and Perspectives." Selected papers on equity and adequacy.

H. F. Ladd, R. Chalk and J. S. Hansen (eds); Washington D.C.: National Academy Press, 1999

- Disparities

"Trends in Disparities in School District Level Expenditures per Pupil." Standard equity measures for all states and trends over time. Excellent basic resource document but the most recent data is 1994.

William Hussar and William Sonnenberg; NCES 2000-020
U.S. Department of Education. Call toll-free: (877)4ED-Pubs
Author Contact: William Hussar (202) 219-1682

- Educational Statistics

"Digest of Educational Statistics: 1999" The basic compendium of educational statistics across the nation. About 500 pages of statistical tables addressing a myriad number of issues. A core document with many comparisons across states. Most of the data is available at the NCES website.

Thomas D. Snyder and Charlene M. Hoffman; NCES 2000-031
U. S. Department of Education
Call toll free: (877)4ED-Pubs

- "Inequalities in Public School District Revenues."

Profiles inequalities in categorical and general state aid, rurality, income, poverty, etc. Has within state and across the states indicators.

National Center for Education Statistics, Statistical Analysis Report, NCES 98-210,
Thomas B. Parrish, Christine S. Hikido, and William J. Fowler, Jr.
Contact: William.Fowler@ed.gov

- Public School Finance Programs of the United States and Canada

Descriptions of state finance systems.

http://nces.ed.gov/edfin/state_finance/StateFinancing.asp

Reform Efforts

National Center on Increasing the Effectiveness of State and Local Education Reform Efforts
– Center for Policy Research in Education – University of Pennsylvania, and University of Wisconsin, Madison
<http://www.upenn.edu/gse/cpre>

- Rural Schools

"Characteristics of Small and Rural Schools"

Information on students, revenues, expenditures, class size, etc.

National Center for Education Statistics, Statistical Analysis Report, NCES 97-529.
Donald McLaughlin, Mette B. Huberman, and Evelyn K. Hawkins. Call toll free (877) 4ED-PUBS. Author contact: Lee M. Hoffman (202) 219-1621

- "Small Schools, Great Strides"

A comprehensive study of the effects of small schools in Chicago and the effects on achievement, attendance, climate, morale and the like. Adequacy and school size findings are applicable to rural interests.

Bank Street College of Education
600 West 112th Street
New York, NY 10025-1898

Standard Textbooks

There are many standard textbook treatments of educational finance issues dealing with adequacy and equity. The following may prove useful in developing a quick background on a particular issues. The listing does not imply a recommendation by the Rural Education Finance Center.

Alexander, Kern and Richard G. Salmon. Public School Finance. Boston: Allyn & Bacon, 1995. ISBN 0-205-16631-8 H66319

Burrup, Percy E., Vern Brimley and Rulon R. Garfield. Financing Education in a Climate of Change. Sixth Edition. Boston: Allyn & Bacon, 1996. ISBN 0-205-19438-9

Odden, Allan R. and Lawrence O. Picus. School Finance: A Policy Perspective. New York: McGraw-Hill, 1992. ISBN 0-07-047486-9

Swanson, Austin D. and Richard A. King. School Finance: It's Economics and Politics. New York: Longman, 1991. ISBN 0-8013-0296-X

Rural School and Community Trust

**1825 K Street NW, Suite 703
Washington DC 20006**

Phone: (202) 955-7177

Rural Education Finance Center

**Gregory C. Malhoit, Director
3344 Hillsborough St., Suite 302
Raleigh, NC 27607**

**Phone: (919) 833-4541
E-mail: greg.malhoit@ruraledu.org**

www.ruraledu.org



NOTICE

REPRODUCTION BASIS



This document is covered by a signed "Reproduction Release (Blanket) form (on file within the ERIC system), encompassing all or classes of documents from its source organization and, therefore, does not require a "Specific Document" Release form.



This document is Federally-funded, or carries its own permission to reproduce, or is otherwise in the public domain and, therefore, may be reproduced by ERIC without a signed Reproduction Release form (either "Specific Document" or "Blanket").